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Tables of Eigenvalues of the Wave Equation in Prolate Spheroidal Coordinates

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ABSTRACT

The wave equation in prolate spheroidal coordinates was separated into radial and angle functions. The differential equation satisfied by the angle functions was written in the form of an eigenvalue problem, that is, as a linear operator operating on eigenfunctions to yield the same eigenfunctions multiplied by corresponding eigenvalues. The eigenvalues were numerically calculated by use of Galerkin's method. This method reduces to the evaluation of the characteristic roots of a large matrix. An 80 by 80 matrix is chosen and a detailed calculation on a high-speed computer leads to a tabulation. The table of prolate eigenvalues published here has the range $m = 0, 1, 2$; $\ell = m(1) m + 49$; $h = 0.1(0.1) 0.9, 1.0(0.2) 8.0, 10.0, 20.0(20.0) 100.0$. The precision is 21 significant figures.

PROBLEM STATUS

This is an interim report on one phase of the problem; work on other phases continues.

AUTHORIZATION

NRL Problem S01-28
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TABLES OF EIGENVALUES OF THE WAVE EQUATION IN PROLATE SPHEROIDAL COORDINATES

INTRODUCTION

In the solution of Helmholtz's wave equation $(\nabla^2 + k)\psi = 0$ by separation of variables in spheroidal coordinates (ξ, η, φ) the following equations occur:

$$\frac{d}{d\xi} \left[(\xi^2 - 1) \frac{dR}{d\xi} \right] - \left[A - h^2 \xi^2 + \frac{m^2}{\xi^2 - 1} \right] R = 0, \quad 1 \leq \xi < \infty, \quad (1)$$

$$\frac{d}{d\eta} \left[(1 - \eta^2) \frac{dS}{d\eta} \right] + \left[A - h^2 \eta^2 - \frac{m^2}{1 - \eta^2} \right] S = 0, \quad -1 \leq \eta \leq 1, \quad (2)$$

$$\frac{d^2 \Phi}{d\varphi^2} + m^2 \Phi = 0, \quad 0 \leq \varphi \leq 2\pi. \quad (3)$$

Here A is a separation constant, $h = kd/2$, $k = 2\pi/\lambda$, d is the interfocal distance of the spheroid, R is a radial function, S is an angle function, and Φ is a rotational function. Equations (1) and (2) have the form of the Liouville equation

$$[p(z)\psi']' + [q(z) + \lambda r(z)]\psi = 0, \quad (4)$$

with the identities

$$p(z) = 1 - \eta^2 \quad \text{or} \quad \xi^2 - 1$$

$$q(z) = -h^2 \eta^2 - \frac{m^2}{1 - \eta^2} \quad \text{or} \quad -h^2 \xi^2 + \frac{m^2}{\xi^2 - 1}$$

$$r(z) = 1$$

and

$$\lambda = A.$$

Since Eqs. (1) and (2) are identical, except for range of the variables η and ξ , we consider only Eq. (2). Here we seek the real eigenvalues $A = A_{m,l}$ ($l = m, m+1, \dots$) for which the solutions of Eq. (2) over a range are nontrivial and nonsingular. The singularities of Eq. (4) are known to occur at $p(z) = 0$, i.e., at $\eta = \pm 1$. The range of interest is thus $-1 \leq \eta \leq +1$, or parametrically $\eta = \cos \theta$, $0 \leq \theta \leq \pi$. The boundary conditions are of the conventional type, $a_1 \psi + a_2 \psi' = 0$ at $\eta = 1$, and $\beta_1 \psi + \beta_2 \psi' = 0$ at $\eta = -1$. For these boundary conditions there will be a lowest eigenvalue A_{mm} which will be smaller in magnitude than any other $A_{m,l}$, and all other eigenvalues can be ordered to form a monotonically increasing sequence $A_{m(l+1)} > A_{m,l}$. To find the eigenvalue $A_{m,l}$ we use the method of Galerkin (1); i.e., we assume that the corresponding eigenfunction can be expanded in a finite orthogonal series $\{\psi_k(\eta)\}$ over the range $-1 \leq \eta \leq 1$ and write

$$\psi_s = \sum_{r=0}^{N-1} C_{sr} \psi_r, \quad s = m, l, \quad (5)$$

in which ψ_r is a solution of Eq. (4) and associated homogeneous boundary conditions in the range $-1 \leq \eta \leq +1$ with known eigenvalue λ_r . Substituting Eq. (5) into Eq. (2), multiplying by ψ_q and integrating over the range according to Galerkin's procedure, one gets

$$\sum_{r=0}^k C_{sr} \left[\int_{-1}^{+1} (1-\eta^2) \phi_r'' \phi_q d\eta + \int_{-1}^{+1} (-2\eta) \phi_r' \phi_q d\eta + \int_{-1}^{+1} \left(-h^2 \eta^2 - \frac{m^2}{1-\eta^2} + \lambda_s \right) \phi_r \phi_q d\eta \right] = 0. \quad (6)$$

An appropriate choice of ϕ_r for the range of η is the associated Legendre function $P_{m+r}^m(\eta)$ which satisfies Eq. (2) for the condition $h=0$. This condition requires that

$$(1-\eta^2) P_{m+r}'' = 2\eta P_{m+r}' - \left[(m+r)(m+r+1) - \frac{m^2}{1-\eta^2} \right] P_{m+r}. \quad (7)$$

Substituting $\phi_r = P_{m+r}^m$ and $\phi_q = P_q^m$ in Eq. (6) and using Eq. (7), it is easily seen that Eq. (6) can be written in the form

$$\sum_{r=0}^k C_{sr} L_{m+r,q} = 0, \quad (8a)$$

where

$$L_{m+r,q} = \left[(\lambda_s - (m+r)(m+r+1)) \int_{-1}^{+1} P_{m+r}^m(\eta) P_q^m(\eta) d\eta - h^2 \int_{-1}^{+1} \eta^2 P_{m+r}^m P_q^m d\eta \right] = 0. \quad (8b)$$

The quantity L can be regarded as a large (though finite) matrix having elements $L_{m+r,q}$ with eigenvalues λ_s . In this light, Eq. (8a) is an eigenvalue problem and the entities C_{sr} are the components of an eigenvector corresponding to each eigenvalue λ_s . Now let $m+r=p$ for convenience and write the normalization and recursion relations of P_p^m in the forms

$$\int_{-1}^{+1} \tilde{P}_p^m \tilde{P}_s^m d\eta = \begin{cases} 1, & p=s, \\ 0, & p \neq s. \end{cases} \quad (9a)$$

$$\tilde{P}_p^m = \frac{P_p^m}{\sqrt{N(p,m)}}, \quad N(p,m) = \frac{2}{2p+1} \frac{(p+m)!}{(p-m)!}, \quad (9b)$$

$$(2p+1)\eta P_p^m = (p-m+1) P_{p+1}^m + (p+m) P_{p-1}^m. \quad (9c)$$

In normalized form the last equation reads

$$\eta \tilde{P}_p^m = A(p) \tilde{P}_{p+1}^m + B(p) \tilde{P}_{p-1}^m, \quad (9d)$$

where

$$A(p) = \sqrt{\frac{N(p+1,m)}{N(p,m)}} \frac{(p-m+1)}{(2p+1)}, \quad B(p) = \frac{p+m}{2p+1} \sqrt{\frac{N(p-1,m)}{N(p,m)}}. \quad (9e)$$

The products $A(q)B(p)$ may have the following two forms depending on the procedure of normalization:

$$A(q)B(p) = \frac{(q-m+1)}{(2q+1)} \frac{(p+m)}{(2p+1)} \frac{1}{N(p,m)} \sqrt{N(q+1,m)N(p-1,m)} \quad (9f)$$

or

$$A(q)B(p) = \frac{(q-m+1)}{(2q+1)} \frac{(p+m)}{(2p+1)} \sqrt{\frac{N(q+1,m)N(p-1,m)}{N(q,m)N(p,m)}} \quad (9g)$$

Equation (9f) is designated as the nonnormalized form, and Eq. (9g) is the normalized form.

Expanding Eq. (8b) by use of Eq. (9d) one obtains further

$$L_{m+r,q} = L_{p,q} = 1 + 2 + 3 + 4 + 5 ,$$

where

$$1 = [\lambda_s - (p)(p+1)] \int_{-1}^{+1} \tilde{P}_p^m \tilde{P}_q^m d\eta \quad (10a)$$

$$2 = -h^2 B(q)B(p) \int_{-1}^{+1} \tilde{P}_{q-1}^m \tilde{P}_{p-1}^m d\eta \quad (10b)$$

$$3 = -h^2 A(p)A(q) \int_{-1}^{+1} \tilde{P}_{q+1}^m \tilde{P}_{p+1}^m d\eta \quad (10c)$$

$$4 = -h^2 A(q)B(p) \int_{-1}^{+1} \tilde{P}_{q+1}^m \tilde{P}_{p-1}^m d\eta \quad (10d)$$

$$5 = -h^2 A(p)B(q) \int_{-1}^{+1} \tilde{P}_{q-1}^m \tilde{P}_{p+1}^m d\eta \quad (10e)$$

It is seen that any three consecutive terms of Eqs. (8a) satisfy the recursion relation

$$\begin{aligned} C_{s,p-m-2} \left[(-h^2) \frac{(p-1-m)(p-m)}{(2p-3)(2p-1)} \right] + C_{s,p-m} \left\{ \lambda_s - p(p+1) \right. \\ \left. - h^2 \left[\frac{(p+1-m)(p+1+m)}{(2p+1)(2p+3)} + \frac{(p-m)(p-m)}{(2p+1)(2p-1)} \right] \right\} \\ + C_{s,p-m+2} \left[(-h^2) \frac{(p+2-m)(p+1+m)}{(2p+5)(2p+3)} \right] = 0 \end{aligned} \quad (11)$$

This is the nonnormalized recursion relation between the constants C_{sr} .

We return to Eq. (9d), which is in the form

$$\eta \tilde{P}_p^m = \sqrt{\frac{(p-m+1)(p+1+m)}{(2p+1)(2p+3)}} \tilde{P}_{p+1}^m + \sqrt{\frac{(p+m)(p-m)}{(2p-1)(2p+1)}} \tilde{P}_{p-1}^m.$$

Substituting this formula into Eq. (8b) one obtains

$$\begin{aligned} \sum_{p=m}^k C_{s,p-m} L_{p,q} = \sum_{p=m}^k C_{s,p-m} \left\{ (\lambda_s - p(p+1)) \int_{-1}^{+1} \tilde{P}_p \tilde{P}_q d\eta - h^2 \int_{-1}^{+1} [A(p)A(q) P_{p+1}^m P_{q+1}^m] d\eta \right. \\ \left. + [A(p)B(q) P_{p+1}^m P_{q-1}^m] + [B(p)A(q) P_{p-1}^m P_{q+1}^m] + [A(q)B(q) P_{p-1}^m P_{q-1}^m] \right\} = 0. \end{aligned}$$

Using the properties of normalization shown in Eq. (9g) this reduces to the recursion relation

$$\begin{aligned} C_{s,p-m} \left\{ \lambda_s - p(p+1) - h^2 \left[\frac{(p-m+1)(p+1+m)}{(2p+1)(2p+3)} + \frac{(p+m)(p-m)}{(2p-1)(2p+1)} \right] \right. \\ \left. - h^2 \left[\sqrt{\frac{(p+m)(p-m)(p-m-1)(p-1-m)}{(2p-1)(2p+1)(2p-3)(2p-1)}} \right] C_{s,p-m-2} \right. \\ \left. - h^2 \left[\sqrt{\frac{(p-m+1)(p+1+m)(p+2+m)(p+2-m)}{(2p+1)(2p+3)(2p+3)(2p+5)}} \right] C_{s,p-m+2} \right\} = 0. \end{aligned} \quad (12)$$

This is the normalized form of the recursion relation between the constants C_{sr} .

In the computation of eigenvalues it is advantageous to use a matrix formulation with normalized elements as given by Eq. (12). However, in the determination of eigenvectors whose components are the constants C_{sr} , it is convenient to obtain these in unnormalized form by use of Eq. (11) with appropriate choices of λ_s and then to normalize them to suit a particular requirement. In this report the following normalization for the components of the eigenvectors is used:

$$\sum_{r=0}^{\infty} C_{sr} \frac{(r+2m)!}{r!} = \frac{(s+m)!}{(s-m)!}. \quad (13)$$

This choice of normalization (see Ref. 2) is arbitrary but very suitable to numerical computation.

COMPUTATION PROCEDURE

All elements in matrix L of Eq. (8b) are real. From Eqs. (11) and (12) it is seen that the subscripted elements $s=p$, $s=p+2$, and $s=p-2$ are non zero, while all other elements of the matrix vanish. Furthermore, one notes that the matrix is symmetrical; i.e., $C_{s,\gamma} = C_{\gamma,s}$. Based on these observations, therefore, we are required to find the eigenvalues λ_s of a real symmetric matrix. To assist in the numerical computation we have used the standard IBM Share-Distributed 704-709 Fortran program 664

by Burton S. Garbow of Argonne National Laboratory (CO-OP ID F4 UCSD 1 EIGEN). This subroutine finds all scalar solutions to the matrix equation $Ax = \lambda x$, where A is a real symmetric matrix. Although the eigenvalues of the separated Helmholtz equation are infinite in number, finite sized matrices yield excellent and well converged eigenvalues provided the selected partition of the infinite matrix is "large enough". In our application we use an 80 by 80 matrix to compute 50 eigenvalues in double precision (21 significant digits).

METHOD OF CHECKING

In Eq. (11) we designate the ratio $C_{sr}/C_{s,r-2}$ by the symbol M_r^m . In the limit $r \rightarrow \infty$ we require that M_r^m vanish. Changing r to $r+2$ so that the ratio of constants is M_{r+2}^m

$$M_{r+2}^m = C_{s,r+2}/C_{s,r}$$

one sees by the recursion relation Eq. (11) that M_{r+2}^m can be written as an infinite continued fraction $[M_{r+2}^m]_\infty$ by the permutation of subscripts, i.e., increasing subscripts so that the ratios read $C_{s,r+4}/C_{s,r+2}$, $C_{s,r+6}/C_{s,r+4}$, etc. Another set of permutations is the set of decreasing subscripts $C_{sr}/C_{s,r-2}$, $C_{s,r-2}/C_{s,r-4}$, etc. This latter set is limited by the requirement that $C_{sr} = 0$ if $r \leq 0$. We can thus write M_{r+2}^m as a finite continued fraction $[M_{r+2}^m]_0$, using this latter set, i.e., the decreasing subscript set. Clearly one requires that

$$[M_{r+2}^m]_\infty - [M_{r+2}^m]_0 \cdot U(\lambda_s) = 0 \quad (14)$$

This is a transcendental equation in the unknown λ whose roots are the eigenvalues λ_s . A skillful procedure for finding these roots has been devised by Bouwkamp (3). He takes the first variation of $U(\lambda)$ due to a variation $\delta\lambda$, devises an equation for $\delta\lambda$ in terms of the M_r^m ratios, and by iteration of Eq. (14) using $\lambda + \delta\lambda_1 + \delta\lambda_2$, etc., finally causes λ to converge to the true value λ_s . This method however requires a good first guess on λ_s , which can then be used as a basis for iteration. In the event that this guess is poor, the method yields a different eigenvalue λ_{s+n} , $n = 2, 4, 6, \dots$. Comparison of the matrix method noted above with the method of Bouwkamp shows that the matrix method agrees with Bouwkamp's method to all 21 significant digits for $h < 10$. For $h > 20$ Bouwkamp's method yields eigenvalues but not in a monotone series. Because these eigenvalues are sometimes identical for different m, l, h , it is seen that Bouwkamp's method fails for large h . The failure is attributable to wrongly chosen starting values. To overcome this difficulty an 80 by 80 matrix is used to obtain eigenvalues which provide starting values for Bouwkamp's method. This procedure of combining the two methods yields 50 correct eigenvalues up to $h = 80$. For $h = 100$ the same method yields approximately 30 eigenvalues with 21 significant digits. This limit in available eigenvalues with required accuracy is due to limitation of the Share program.

RANGE OF TABULATION

The range covered by these eigenvalue tables is as follows:

$$m = 0, 1, 2$$

$$l = m(1) m + 49$$

$$h = 0.1 (0.1) 0.9, 1.0 (0.2) 8.0, 10.0, 20.0, 40.0, 60.0, 80.0, 100.0$$

The accuracy is considered to be 21 significant figures.

COMPARISON WITH OTHER PUBLICATIONS

The existing literature contains the following ranges of tabulation of prolate spheroidal eigenvalues.

Chang and Yeh (4):

$$m = 0 (1) 9, \ell = m (1) 9, h = 0.1 (0.1) 10 (1.0) 100$$

Accuracy = 12 significant figures.

Stukey and Layton (5):

$$m = 0 (1) 9, \ell = m (1) m + 9, h = 0.25 (0.25) 10.0 (1.0) 20.0$$

Accuracy = 11 significant figures.

The number of values of ℓ (i.e., the number of eigenfunctions for fixed m) in these latter collections is too limited to allow complete field calculations based on orthogonal expansions in eigenfunctions. For example, when $m = 0$, the Chang and Yeh tables contain ten values of ℓ . Since in many physical problems only even or odd integers are permitted, this number has been found to be too small to permit convergence, except for very small values of h . The NRL tables in contrast provide 50 values of ℓ for h as large as 80.

The increase in accuracy (from 12 to 21 figures) in these NRL tables is motivated by a desire to permit accurate determination of the components of the eigenvectors (that is the expansion constants $d_n(h, m, \ell)$), by a three-term recursion formula (6). Low accuracy of the eigenvalue results in poor d_n constants. By increasing the accuracy of the eigenvalue to 21 places, we are able to obtain well over 100 d_n constants having accuracy comparable to that of the eigenvalue. Accurate determination of functions involved in field calculations is not possible without this capability.

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TABLES OF EIGENVALUES OF THE
EXTERIOR ACOUSTIC RADIATION PROBLEM
FOR PROLATE SPHEROIDAL COORDINATES

Range of Parameters

$h = 0.1 (0.1) 1.0, 1.2 (0.2) 8.0, 10, 20 (20.0) 100.0$

$m = 0, 1, 2$

$\ell = m (1) m + 49$

PROBLATE EIGENVALUES $M = 0.10$

$M = 0$			$M = 1$			$M = 2$		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	3.3185232229905631206+003	1	2.0019995429790258333+000	2	6.00142837710116594828+000	2	6.00142837710116594828+000	2
1	2.00599931422478780977+000	2	6.00428532557322463209+000	3	1.20033331088792329426+001	3	1.20033331088792329426+001	3
2	6.00523910977105148434+000	3	1.20046688030243073977+001	4	2.00048533138162091154+001	4	2.00048533138162091154+001	4
3	1.2005111405863166067+001	4	2.00048533138162091154+001	5	3.0003590001974291472+001	5	3.0003590001974291472+001	5
4	2.00050651125753269094+001	5	3.0004871883814724612+001	6	4.2004554893082383972+001	6	4.2004554893082383972+001	6
5	3.00050428480355646030+001	6	4.2004991578958927610+001	7	5.60046606671245929922+001	7	5.60046606671245929922+001	7
6	4.2005030381750071985+001	7	5.60049321784437268184+001	8	7.20047368721604344453+001	8	7.20047368721604344453+001	8
7	5.60050228826257684228+001	8	7.20049474094148975571+001	9	9.00047899421743197917+001	9	9.00047899421743197917+001	9
8	7.2005017588662224927+001	9	9.00049580163935122034+001	10	1.0004828398009666729+002	10	1.0004828398009666729+002	10
9	9.00050140412266763610+001	10	1.0004965702456893302+002	11	1.32004857162590702521+002	11	1.32004857162590702521+002	11
10	1.10005011470656342601+002	11	1.32004971451549553967+002	12	1.56004879244267986692+002	12	1.56004879244267986692+002	12
11	1.32005009547897481053+002	12	1.56004975864949627547+002	13	1.82004896566827156978+002	13	1.82004896566827156978+002	13
12	1.56005008071857204501+002	13	1.82004979327152451189+002	14	2.10004910407594905060+002	14	2.10004910407594905060+002	14
13	1.82005006913938364648+002	14	2.1000496209346247445+002	15	2.40004921641928118077+002	15	2.40004921641928118077+002	15
14	2.1000500988758664894+002	15	2.40004984378832318452+002	16	2.72004930886141666188+002	16	2.72004930886141666188+002	16
15	2.40005005237805053613+002	16	2.72004986186443126001+002	17	3.06004938584421840699+002	17	3.06004938584421840699+002	17
16	2.72005004619880140781+002	17	3.0600498725073118139+002	18	3.42004945063499027303+002	18	3.42004945063499027303+002	18
17	3.06005004105292447403+002	18	3.42004989020024913949+002	19	3.80004950568067687526+002	19	3.80004950568067687526+002	19
18	3.42005003672201807431+002	19	3.8000499012020841538+002	20	4.20004955284334754232+002	20	4.20004955284334754232+002	20
19	3.80005003304291721915+002	20	4.20004991062829496788+002	21	4.62004959356038171474+002	21	4.62004959356038171474+002	21
20	4.20005002988952270133+002	21	4.62004991876627326007+002	22	5.06004962895568280898+002	22	5.06004962895568280898+002	22
21	4.62005002716844355275+002	22	5.06004972584061426150+002	23	5.52004965991832163744+002	23	5.52004965991832163744+002	23
22	5.06005002460262497766+002	23	5.52004993202901368195+002	24	6.00004968715907704763+002	24	6.00004968715907704763+002	24
23	5.52005002273258146472+002	24	6.00004993747353257615+002	25	6.50004971125170156570+002	25	6.50004971125170156570+002	25
24	6.0000500291168734977+002	25	6.5000499422888448621+002	26	7.02004973266345456700+002	26	7.02004973266345456700+002	26
25	6.500050030162684294+002	26	7.02004994656834050989+002	27	7.5600497517797971366+002	27	7.5600497517797971366+002	27
26	7.02005001786997094400+002	27	7.56004995033869674276+002	28	8.12004976891264520368+002	28	8.12004976891264520368+002	28
27	7.560050016527054704+002	28	8.1200499533833501884+002	29	8.70004978433182770857+002	29	8.70004978433182770857+002	29
28	8.1200500154691260235+002	29	8.70004995689512542836+002	30	9.30004979825718961175+002	30	9.30004979825718961175+002	30
29	8.700050014162262648+002	30	9.3000499596783089839+002	31	9.92004981087570316320+002	31	9.92004981087570316320+002	31
30	9.30005001348539211073+002	31	9.92004996220036095067+002	32	1.05600498223459689834+003	32	1.05600498223459689834+003	32
31	9.9200500126419149170+002	32	1.05600499644928445644+003	33	1.12200498328032311984+003	33	1.12200498328032311984+003	33
32	1.05600500118751902927+003	33	1.12200499665829425351+003	34	1.19000498423633877060+003	34	1.19000498423633877060+003	34
33	1.12200500111761800902+003	34	1.19000499683936989835+003	35	1.26000498511262193276+003	35	1.26000498511262193276+003	35
34	1.19000500105371364443+003	35	1.26000499702450967759+003	36	1.33200498591780070470+003	36	1.33200498591780070470+003	36
35	1.26000500099515095730+003	36	1.33200499718543806025+003	37	1.40600498665936663862+003	37	1.40600498665936663862+003	37
36	1.3320050009431120557+003	37	1.4060049973336523788+003	38	1.48200498797696322581+003	38	1.48200498797696322581+003	38
37	1.40600500089174762024+003	38	1.48200499747045771548+003	39	1.56000498856372250126+003	39	1.56000498856372250126+003	39
38	1.4820050005459570223+003	39	1.56000499759699597079+003	40	1.64000498910854562283+003	40	1.64000498910854562283+003	40
39	1.56000500040367356950+003	40	1.6400049977142657994+003	41	1.72000498961533640981+003	41	1.72000498961533640981+003	41
40	1.6400050007645195373+003	41	1.7200049978231615048+003	42	1.8060049908755469910+003	42	1.8060049908755469910+003	42
41	1.72000500072803353965+003	42	1.8060049979244521257+003	43	1.89200499202683470378+003	43	1.89200499202683470378+003	43
42	1.80600500066412737300+003	43	1.89200499831883281167+003	44	1.98000499505282755980+003	44	1.98000499505282755980+003	44
43	1.89200500066259219160+003	44	1.9800049981069182197+003	45	2.0700049904023971117+003	45	2.0700049904023971117+003	45
44	1.980005000631324510+003	45	2.0700049981892561547+003	46	2.16200499826633591032+003	46	2.16200499826633591032+003	46
45	2.07000500050259491064+003	46	2.16200499826633591032+003	47	2.25600499838585605718+003	47	2.25600499838585605718+003	47
46	2.1620050005057961592845+003	47	2.25600499838585605718+003	48	2.35200499840643020727+003	48	2.35200499840643020727+003	48
47	2.25600500050566488554+003	48	2.35200499840643020727+003	49	2.45000499847019261115+003	49	2.45000499847019261115+003	49
48	2.35200500053276203991+003	49	2.45000499847019261115+003	50	2.55000499855020279632+003	50	2.55000499855020279632+003	50
49	2.45000500051163699760+003	50	2.55000499855020279632+003	51		51		51

PROBABLE EIGENVALUES H = 0.20

H = 0		H = 1		H = 2	
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
0	1.33096597641045922909+002	1	2.00799269351080376615+000	2	6.00571117820528177824+000
1	2.02398902467711456939+000	2	6.01713663843673777877+000	3	1.20133297426817990300+001
2	6.0209685059416855362+000	3	1.201868842180253051+001	4	2.00161035517438345973+001
3	1.20204497189341018423+001	4	2.0019226827644331847+001	5	3.00174363103477322366+001
4	2.00202625806823244181+001	5	3.00194866024243576561+001	6	4.20181823741971874831+001
5	3.00201727480802642172+001	6	4.2019637435376453115+001	7	5.60186430721030158061+001
6	4.20201224720540577032+001	7	5.60197293347183956665+001	8	7.20189478492658151594+001
7	5.60200914288064166734+001	8	7.20197901295770555255+001	9	9.00191600831730269307+001
8	7.20200708926667998972+001	9	9.00198324639725543670+001	10	1.10019313866711524435+002
9	9.00200565924014203325+001	10	1.10019863138621480258+002	11	1.32019428887159367560+002
10	1.10020046230731108320+002	11	1.32019886081934402431+002	12	1.56019517183646377569+002
11	1.32020038480853861290+002	12	1.56019903694222515244+002	13	1.82019586448542510159+002
12	1.56020032531358052657+002	13	1.82019917510300795590+002	14	2.10019641790334158811+002
13	1.82020027864353311817+002	14	2.10019928549162173934+002	15	2.40019685709720340537+002
14	2.10020024135520932430+002	15	2.40019937509091780105+002	16	2.72019723671353514843+002
15	2.40020021108956164553+002	16	2.72019944881707382684+002	17	3.06019754451486059250+002
16	2.72020018618543130880+002	17	3.060199510213317209057+002	18	3.42019780356643424739+002
17	3.06020018544650052557+002	18	3.42019956188530418991+002	19	3.8001980236285775627+002
18	3.42020014799184987219+002	19	3.80019960578518018494+002	20	4.20019821221985573538+002
19	3.80020013316280697919+002	20	4.2001996433979788952+002	21	4.62019837501488649387+002
20	4.2002001204574902217+002	21	4.62019967587012796743+002	22	5.06019851653189364047+002
21	4.6202001094864490939+002	22	5.06019974049802192612+002	23	5.52019864032579842236+002
22	5.0602000995347639573+002	23	5.52019972879074935359+002	24	6.0001987492385881805+002
23	5.5202000916125995215+002	24	6.00019975051519442785+002	25	6.50019884556436279770+002
24	6.00020008427410652674+002	25	6.5001997672895132730+002	26	7.02019893117142239744+002
25	6.50020007783844535199+002	26	7.0201997868046780235+002	27	7.5601990759365324551+002
26	7.02020007201579245016+002	27	7.5601998020483344888+002	28	8.1201990761001174769+002
27	7.560200068665968787+002	28	8.12019981571305799863+002	29	8.70019913774755197822+002
28	8.12020006225075893865+002	29	8.70019982800966858795+002	30	9.30019919342233966626+002
29	8.70020005809705611240+002	30	9.3001998391149554960+002	31	9.92019924387253672168+002
30	9.3002000543577337989+002	31	9.920199849178032322+002	32	1.05601992897316656616+003
31	9.9202000509465432665+002	32	1.05601998583253854161+003	33	1.12201993315406622856+003
32	1.0560200047856633884+003	33	1.12201998666648731518+003	34	1.19001993697629103814+003
33	1.12202000450376172359+003	34	1.19001998742889251555+003	35	1.26001994047973531260+003
34	1.1900200042644269385+003	35	1.26001998812771171905+003	36	1.33201994369889577624+003
35	1.2600200040103710217+003	36	1.33201998876982586421+003	37	1.40601994666372495666+003
36	1.33202000379346965246+003	37	1.40601998936120947388+003	38	1.48201994940033118286+003
37	1.40602000359370467465+003	38	1.4820199899070782227+003	39	1.56001995193155590941+003
38	1.48202000340931695756+003	39	1.5600199904119635197+003	40	1.64001995427745234584+003
39	1.56002000323876748420+003	40	1.64001999087989174412+003	41	1.72201995645568421096+003
40	1.64002000306070510466+003	41	1.72201999133437565674+003	42	1.80601995848185949676+003
41	1.72202000293359566872+003	42	1.80601999171852399955+003	43	1.89201996036981107242+003
42	1.80602000279741953357+003	43	1.89201999209511216414+003	44	1.98001996213183359108+003
43	1.89202000267041267630+003	44	1.9800199924657632085+003	45	2.07001996377888430795+003
44	1.98002000255149069444+003	45	2.07001999277510747350+003	46	2.16201996532075395946+003
45	2.07002000244021230825+003	46	2.16201999308265884401+003	47	2.25601996676621269868+003
46	2.16202000233662663817+003	47	2.2560199937097888344+003	48	2.35201996812313516378+003
47	2.25602000223923436275+003	48	2.35201999364193921692+003	49	2.45001996939868082149+003
48	2.35202000214750731174+003	49	2.45001999389605309599+003	50	2.55001997059902273729+003
49	2.45002000206186818993+003	50	2.55001999413549540291+003	51	2.65201997173015584712+003

PROLATE EIGENVALUES $M = 0.30$

$M = 0$			$M = 1$			$M = 2$		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	2.98803437342644445140+002	1	2.01796306015002121245+000	2	6.012841425566649133747+000	2	6.012841425566649133747+000	2
1	2.05394441287899147139+000	2	6.03853995224329500038+000	3	1.20299818275097954919+001	3	1.20299818275097954919+001	3
2	6.04722472491161370910+000	3	1.20320109684811415475+001	4	2.00362320104018569506+001	4	2.00362320104018569506+001	4
3	1.20460267261012339334+001	4	2.00329583845808194795+001	5	3.00392328553474297506+001	5	3.00392328553474297506+001	5
4	2.0045987974026735171+001	5	3.0038533562015961206+001	6	4.20409119041400904995+001	6	4.20409119041400904995+001	6
5	3.004593768406456447+001	6	4.204187243454856467+001	7	5.60419484251451043285+001	7	5.60419484251451043285+001	7
6	4.2045279105831265212+001	7	5.604393331510225981+001	8	7.20426340129034661187+001	8	7.20426340129034661187+001	8
7	5.60452083335031042731+001	8	7.2045226361738386166+001	9	9.0043113662774561266+001	9	9.0043113662774561266+001	9
8	7.20451615277301936961+001	9	9.004624537900309790+001	10	1.1004345721804269528+002	10	1.1004345721804269528+002	10
9	9.00451289360142811303+001	10	1.10046632948586142665+002	11	1.32043715884049475937+002	11	1.32043715884049475937+002	11
10	1.10045105324548216+002	11	1.3204474471835224983+002	12	1.56043914437830501706+002	12	1.56043914437830501706+002	12
11	1.3204508765450838307+002	12	1.5604478419112526492+002	13	1.82044070188830108985+002	13	1.82044070188830108985+002	13
12	1.56045074110252268580+002	13	1.82044815154131529+002	14	2.1004419462806928965+002	14	2.1004419462806928965+002	14
13	1.82045063477287658125+002	14	2.1004483989303678201+002	15	2.40044295629392607047+002	15	2.40044295629392607047+002	15
14	2.10045054981926431630+002	15	2.4004485997206070322+002	16	2.72044378735990833286+002	16	2.72044378735990833286+002	16
15	2.4004504806661721878+002	16	2.72044876493596320586+002	17	3.06044447942585050246+002	17	3.06044447942585050246+002	17
16	2.72045042413057041335+002	17	3.0604489251805722975+002	18	3.42044506187372493367+002	18	3.42044506187372493367+002	18
17	3.06045037688393861255+002	18	3.42044901830808262714+002	19	3.80044555670697412922+002	19	3.80044555670697412922+002	19
18	3.42045033712082995071+002	19	3.8004491668035093928+002	20	4.2004459806689628455+002	20	4.2004459806689628455+002	20
19	3.80045030333308493325+002	20	4.2004492096344350826+002	21	4.6204463466835821981+002	21	4.6204463466835821981+002	21
20	4.20045027435565179014+002	21	4.6204492737266667213+002	22	5.06044666485611157865+002	22	5.06044666485611157865+002	22
21	4.62045024940821690113+002	22	5.06044933697891597643+002	23	5.5204469431799596890+002	23	5.5204469431799596890+002	23
22	5.06045022768661426842+002	23	5.52044939230928961619+002	24	6.0004471880454330178+002	24	6.0004471880454330178+002	24
23	5.52045020666860381890+002	24	6.0004494098817693349+002	25	6.50044740461076945354+002	25	6.50044740461076945354+002	25
24	6.00045019196932924791+002	25	6.50044948404103239201+002	26	7.02044759707671282604+002	26	7.02044759707671282604+002	26
25	6.5004501718463993562+002	26	7.020449523029598831+002	27	7.56044776889222132359+002	27	7.56044776889222132359+002	27
26	7.0204501640451918479+002	27	7.560449564596090798+002	28	8.1204479221039045835+002	28	8.1204479221039045835+002	28
27	7.5604501521352334780+002	28	8.12044958707817231103+002	29	8.70044806150789466712+002	29	8.70044806150789466712+002	29
28	8.12045014180086173026+002	29	8.70044961463112977884+002	30	9.30044818667739250852+002	30	9.30044818667739250852+002	30
29	8.7004501323389223859+002	30	9.30044961951461955710+002	31	9.9204483009967180051+002	31	9.9204483009967180051+002	31
30	9.300450123472570743+002	31	9.9204496206278011720+002	32	1.0560448403200458322+003	32	1.0560448403200458322+003	32
31	9.92045011605053515763+003	32	1.056049682590438495+003	33	1.12204484971955049902+003	33	1.12204484971955049902+003	33
32	1.05604501090119490005+003	33	1.12204497012451007640+003	34	1.1900448581266460716+003	34	1.1900448581266460716+003	34
33	1.12204501025950021129+003	34	1.19004497183280660416+003	35	1.26004486618904283144+003	35	1.26004486618904283144+003	35
34	1.19004500967282696038+003	35	1.26004497339862513988+003	36	1.33204487342636494232+003	36	1.33204487342636494232+003	36
35	1.26004500913514178915+003	36	1.332044974803738427251+003	37	1.40604488009185012389+003	37	1.40604488009185012389+003	37
36	1.33204500864105983728+003	37	1.40604497616247146743+003	38	1.482044886442138679+003	38	1.482044886442138679+003	38
37	1.40604500818601374680+003	38	1.4820449733855595487+003	39	1.56004489153484704152+003	39	1.56004489153484704152+003	39
38	1.4820450077659962140+003	39	1.56004497851684578434+003	40	1.6400448972087653214+003	40	1.6400448972087653214+003	40
39	1.56004500737750137211+003	40	1.64004497956530676387+003	41	1.7220449021059209256+003	41	1.7220449021059209256+003	41
40	1.64004500701742132362+003	41	1.7220449953883067913+003	42	1.80604490666111081555+003	42	1.80604490666111081555+003	42
41	1.72204500668315493392+003	42	1.80604498144339450685+003	43	1.8920449109055493249+003	43	1.8920449109055493249+003	43
42	1.80604500637212660042+003	43	1.89204498228818080661+003	44	1.980044911856971016821+003	44	1.980044911856971016821+003	44
43	1.89204500608239118188+003	44	1.9800449811803252542+003	45	2.070044922036055604+003	45	2.070044922036055604+003	45
44	1.98004500581197763504+003	45	2.070044983811603252542+003	46	2.162044922036055604+003	46	2.162044922036055604+003	46
45	2.07004500559168190704+003	46	2.16204498450091260719+003	47	2.256044922036055604+003	47	2.256044922036055604+003	47
46	2.1620450053225212554+003	47	2.2560449851469324103+003	48	2.352044922036055604+003	48	2.352044922036055604+003	48
47	2.25604500510067436208+003	48	2.35204498575338225588+003	49	2.4500449330247757828+003	49	2.4500449330247757828+003	49
48	2.35204500489241327230+003	49	2.45004498632342946722+003	50	2.5500449330247757828+003	50	2.5500449330247757828+003	50
49	2.45004500469665417073+003	50	2.55004498685993047137+003					

PROBATE EIGENVALUES $\mu = 0.40$

$\mu = 0$			$\mu = 1$			$\mu = 2$		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	5.29560091209193499764+002	1	2.03188346936991197323+000	2	6.02280753313230507631+000	2	6.02280753313230507631+000	2
1	2.095824209188136886676+000	2	6.06847197393336477616+000	3	1.20532759222371327651+001	3	1.20532759222371327651+001	3
2	6.08406740713922207376+000	3	1.20747811215375386943+001	4	3.00664099799005823552+001	4	3.00664099799005823552+001	4
3	1.20818623510605097779+001	4	2.00769332833355372+001	5	3.00697501640883846779+001	5	3.00697501640883846779+001	5
4	2.00810844244354257124+001	5	3.0077971475348326590+001	6	4.207273361568566769345+001	6	4.207273361568566769345+001	6
5	3.008071269084825468821+001	6	4.2078582592672935326+001	7	5.6074578741252255343+001	7	5.6074578741252255343+001	7
6	4.20805050085423318714+001	7	5.6078927278154334349+001	8	7.20757971647687808748+001	8	7.20757971647687808748+001	8
7	5.6080376888482514401+001	8	7.20791683884675534309+001	9	9.00766453631366445450+001	9	9.00766453631366445450+001	9
8	7.2080292176000899369+001	9	9.00793362300077345820+001	10	1.10077259820972752728+002	10	1.10077259820972752728+002	10
9	9.00802332096107719061+001	10	1.10079457815049772227+002	11	1.3207719337012838274+002	11	1.3207719337012838274+002	11
10	1.10080190492664122710+002	11	1.32079548739437592853+002	12	1.56078072039552691693+002	12	1.56078072039552691693+002	12
11	1.3208015854763592237+002	12	1.56079618527799648262+002	13	1.82078348693771378473+002	13	1.82078348693771378473+002	13
12	1.56080134026316163484+002	13	1.82079673268229525295+002	14	2.10078569720517670245+002	14	2.10078569720517670245+002	14
13	1.82080117958620977574+002	14	2.10079717001636848051+002	15	2.40078749110945935862+002	15	2.40078749110945935862+002	15
14	2.10080099450470593743+002	15	2.40079752496542483268+002	16	2.72078896713961559278+002	16	2.72078896713961559278+002	16
15	2.40080086959604179614+002	16	2.72079781701778910953+002	17	3.0607901926693823884+002	17	3.0607901926693823884+002	17
16	2.72080076698536556365+002	17	3.06079806021658549835+002	18	3.4207912308909584670+002	18	3.4207912308909584670+002	18
17	3.06080069153866477447+002	18	3.42079826469009558935+002	19	3.80079210949336908842+002	19	3.80079210949336908842+002	19
18	3.420800609627825537864+002	19	3.80079843872473361772+002	20	4.20079286242275774902+002	20	4.20079286242275774902+002	20
19	3.80080054853204629143+002	20	4.20079858774866357645+002	21	4.6207935123321436327+002	21	4.6207935123321436327+002	21
20	4.20080049619283941731+002	21	4.6207981636105325948+002	22	5.0607945717433338671+002	22	5.0607945717433338671+002	22
21	4.62080045100931671527+002	22	5.0607982616111253299+002	23	5.5207945717433338671+002	23	5.5207945717433338671+002	23
22	5.06080041172470182971+002	23	5.5207982595810123093+002	24	6.00079500659100817986+002	24	6.00079500659100817986+002	24
23	5.5208003736358880574+002	24	6.000799011997755823+002	25	6.50079539117872497505+002	25	6.50079539117872497505+002	25
24	6.00080034713414282714+002	25	6.50079908092941203566+002	26	7.02079677999064767232+002	26	7.02079677999064767232+002	26
25	6.50080032039826967101+002	26	7.02079931490534175744+002	27	7.56079633808234368164+002	27	7.56079633808234368164+002	27
26	7.02080029663770781352+002	27	7.56079931490534175744+002	28	8.120796331159092613919+002	28	8.120796331159092613919+002	28
27	7.56080027542664277931+002	28	8.12079927020707596361+002	29	8.70079677999064767232+002	29	8.70079677999064767232+002	29
28	8.12080025641276049057+002	29	8.70079931490534175744+002	30	9.2079698140572333731+002	30	9.2079698140572333731+002	30
29	8.70080023930268302526+002	30	9.2079936288529137933+002	31	1.05607971644912911241+003	31	1.05607971644912911241+003	31
30	9.2080022385037322484+002	31	9.207994027375460561+002	32	1.12207973314064430357+003	32	1.12207973314064430357+003	32
31	9.92080020954841885150+002	32	1.05607994386630947549+003	33	1.19007974840013894316+003	33	1.19007974840013894316+003	33
32	1.05608001971204995212+003	33	1.12207994719891397151+003	34	1.3320797523867006693+003	34	1.3320797523867006693+003	34
33	1.12208001855186193504+003	34	1.19007995021817671152+003	35	1.406079780750339617+003	35	1.406079780750339617+003	35
34	1.19008001749085525238+003	35	1.26007995298561493061+003	36	1.4820797800023535799+003	36	1.4820797800023535799+003	36
35	1.26008001651852724506+003	36	1.33207995552848135655+003	37	1.560079960810547151402+003	37	1.560079960810547151402+003	37
36	1.33208001562509192995+003	37	1.40607995787043421218+003	38	1.64307981747080664449+003	38	1.64307981747080664449+003	38
37	1.40608001480224581791+003	38	1.48207996003211180249+003	39	1.72207982616676419245+003	39	1.72207982616676419245+003	39
38	1.4820800140427422278+003	39	1.56007996203154566401+003	40	1.80607983425565956431+003	40	1.80607983425565956431+003	40
39	1.5608000334024128319+003	40	1.64007994386458172806+003	41	1.89207984174272058159+003	41	1.89207984174272058159+003	41
40	1.6408000126877706739+003	41	1.72207996560517387111+003	42	1.9800798482703343825+003	42	1.9800798482703343825+003	42
41	1.72208001208464691180+003	42	1.80607996720565191277+003	43	2.07007985540234454877+003	43	2.07007985540234454877+003	43
42	1.80608001152241875703+003	43	1.89207996865694331071+003	44	2.16207986155774284578+003	44	2.16207986155774284578+003	44
43	1.89208001099835325936+003	44	1.98007997008876032975+003	45	2.2560798732824247520+003	45	2.2560798732824247520+003	45
44	1.98008001050938802968+003	45	2.07007997138975865708+003	46	2.3520798727452816847+003	46	2.3520798727452816847+003	46
45	2.07008001005253189062+003	46	2.16207997260767260306+003	47	2.45007988262937698144+003	47	2.45007988262937698144+003	47
46	2.16208000962431744452+003	47	2.25607997374942999427+003	48	2.55007988714501118595+003	48	2.55007988714501118595+003	48
47	2.25608000922316056565+003	48	2.35207997482125138029+003	49		49		49
48	2.35208000884657568475+003	49	2.45007997677692908349+003	50		50		50
49	2.45008000849259593834+003	50		51		51		51

PROLATE EIGENVALUES $M = 0.50$

$M = 0$			$M = 1$			$M = 2$		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	6.24148067425269924097+002	1	2.04971618224062220437+000	2	6.03559336972095721281+000	2	6.03559336972095721281+000	2
1	2.14957048639102664049+000	2	6.1069001304053347211+000	3	1.20831932416070072708+001	3	1.20831932416070072708+001	3
2	6.13157927017693193654+000	3	1.2116750124786326057+001	4	2.01006354949635847740+001	4	2.01006354949635847740+001	4
3	1.21279845845773599793+001	4	2.01202040525559849298+001	5	3.0108993505176764022+001	5	3.0108993505176764022+001	5
4	2.0126734022917918225+001	5	3.01218504142420057188+001	6	4.21136580311951099944+001	6	4.21136580311951099944+001	6
5	3.01261390130422197396+001	6	4.21227691242426947092+001	7	5.61165338371902165302+001	7	5.61165338371902165302+001	7
6	4.21258067967383142449+001	7	5.6123355032194927236+001	8	7.21184398252384154260+001	8	7.21184398252384154260+001	8
7	5.61256019826114717963+001	8	7.21237098289709744084+001	9	9.01197642730369939073+001	9	9.01197642730369939073+001	9
8	7.21254666140213512337+001	9	9.01237073286323566176+001	10	1.0120723581088317145+002	10	1.0120723581088317145+002	10
9	9.0125372407969724556+001	10	1.01215900051173506+002	11	1.32121440902978543275+002	11	1.32121440902978543275+002	11
10	1.012530417190581952+002	11	1.32124300075202762899+002	12	1.56121991434442443052+002	12	1.56121991434442443052+002	12
11	1.3212525315066253380+002	12	1.56124408345206674031+002	13	1.82122423231757134059+002	13	1.82122423231757134059+002	13
12	1.56125213992462922255+002	13	1.82124493263231024120+002	14	2.10122768167198893641+002	14	2.10122768167198893641+002	14
13	1.8212518328049600737+002	14	2.10124561102119318012+002	15	2.40123048148328109604+002	15	2.40123048148328109604+002	15
14	2.1012515974480877972+002	15	2.40124616158847669211+002	16	2.72123278492699976568+002	16	2.72123278492699976568+002	16
15	2.4012513831942799132+002	16	2.72124661457784145089+002	17	3.06123470300351540935+002	17	3.06123470300351540935+002	17
16	2.72125122448144645208+002	17	3.06124699178038242100+002	18	3.4212363171974880196+002	18	3.4212363171974880196+002	18
17	3.0612510880533371108+002	18	3.42124730922142066437+002	19	3.80123768852375997670+002	19	3.80123768852375997670+002	19
18	3.42125097323939506123+002	19	3.80124780994720337920+002	20	4.20123886340646718418+002	20	4.20123886340646718418+002	20
19	3.80125087569498259484+002	20	4.20124800940850160382+002	21	4.62123987767714940978+002	21	4.62123987767714940978+002	21
20	4.20125079213262289059+002	21	4.62124800940850160382+002	22	5.06124075934990528069+002	22	5.06124075934990528069+002	22
21	4.62125071998464963081+002	22	5.06124818279354260979+002	23	5.52124153058341468728+002	23	5.52124153058341468728+002	23
22	5.0612506727761835740+002	23	5.521248334600277699+002	24	6.0012420909128638307+002	24	6.0012420909128638307+002	24
23	5.5212506024212654470+002	24	6.00124846789148592452+002	25	6.50124280917123126862+002	25	6.50124280917123126862+002	25
24	6.00125059416005187430+002	25	6.501248585996656753+002	26	7.02124334246846379778+002	26	7.02124334246846379778+002	26
25	6.5012505147722170676+002	26	7.02124869077429031021+002	27	7.56124381853612684714+002	27	7.56124381853612684714+002	27
26	7.0212504735447091999+002	27	7.56124878439525202056+002	28	8.1212424528760771671+002	28	8.1212424528760771671+002	28
27	7.5612504396825050758+002	28	8.12124886831750771986+002	29	8.70124462930769414819+002	29	8.70124462930769414819+002	29
28	8.1212504093242112347+002	29	8.70124894383646813050+002	30	9.301244976117553265+002	30	9.301244976117553265+002	30
29	8.70125036201354261318+002	30	9.3012490120381101384+002	31	9.92124529037874467947+002	31	9.92124529037874467947+002	31
30	9.3012503573450274742+002	31	9.9212490738384476445+002	32	1.05612455760386796180+003	32	1.05612455760386796180+003	32
31	9.921250333499208536191+002	32	1.056124913300144657204+003	33	1.1212458364676284078+003	33	1.1212458364676284078+003	33
32	1.05612503146733953306+003	33	1.12212491812287090410+003	34	1.2601246074526489970+003	34	1.2601246074526489970+003	34
33	1.122125029614934778+0+003	34	1.19012492280489311499+003	35	1.48212468484284071204+003	35	1.48212468484284071204+003	35
34	1.19012502792145920337+003	35	1.26012492709639200403+003	36	1.60124724140910249513+003	36	1.60124724140910249513+003	36
35	1.26012502636943380717+003	36	1.3321249310396323528+003	37	1.80612474140910249513+003	37	1.80612474140910249513+003	37
36	1.33212502494297179002+003	37	1.406124933467131079810+003	38	1.98012474140910249513+003	38	1.98012474140910249513+003	38
37	1.40612502362940027991+003	38	1.48212493380234136765+003	39	2.070124955635551250+003	39	2.070124955635551250+003	39
38	1.48212502494297179002+003	39	1.56012494112392451463+003	40	2.162124955635551250+003	40	2.162124955635551250+003	40
39	1.56012502494297179002+003	40	1.64012494399741054923+003	41	2.35212480146068474284+003	41	2.35212480146068474284+003	41
40	1.6401250205616338691+003	41	1.72212494666551135858+003	42	2.550124868178351921+003	42	2.550124868178351921+003	42
41	1.7221250192911422081+003	42	1.8061249494734784248+003	43	2.652124862392703435403+003	43	2.652124862392703435403+003	43
42	1.8061250183536628661+003	43	1.89212495145986505493+003	44		44		44
43	1.8921250175570028732+003	44	1.98012495361812748699+003	45		45		45
44	1.98012501677635856156+003	45	2.070124955635551250+003	46		46		46
45	2.07012501604662807911+003	46	2.162124955635551250+003	47		47		47
46	2.16212501556355247175+003	47	2.35212480146068474284+003	48		48		48
47	2.35212501472316659044+003	48	2.4501249625189477961+003	49		49		49
48	2.45012501412400662143+003	49	2.550124966398928074486+003	50		50		50
49	2.5501250133556394886920+003	50		51		51		51

PROLATE EIGENVALUES M = 0.60

M = 0			M = 1			M = 2			
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	
0	1.118102156512679029974+001	1	2.07141319499990734049+000	2	6.05117834905640801263+000	3	1.21197096886512666418+001	4	2.014490589758463659+001
1	2.2151065145114877650+000	2	6.1537820666148244498+000	3	1.21197096886512666418+001	4	2.014490589758463659+001	5	3.0156956087049697752+001
2	6.1596644460715188771+000	3	1.216817139916378651+4+001	4	2.01731406452971935252+001	5	3.0156956087049697752+001	6	4.2163681237137560282+001
3	1.21844296607605934971+001	4	3.01754997434696102/32+001	5	4.21768140415362279971+001	6	5.6167826327415237386+001	7	7.2170525231369570248+001
4	2.0182567965259994947+001	5	4.21768140415362279971+001	6	5.6167826327415237386+001	7	7.2170525231369570248+001	8	9.0172470921778679078+001
5	3.01616849514870550284+001	6	5.6167826327415237386+001	7	7.2170525231369570248+001	8	9.0172470921778679078+001	9	1.017385095004887588+002
6	4.21811927974057353910+001	7	7.2170525231369570248+001	8	9.0172470921778679078+001	9	1.017385095004887588+002	10	1.3217488271172953371+002
7	5.6168495021624542024+001	8	9.0172470921778679078+001	9	1.017385095004887588+002	10	1.3217488271172953371+002	11	1.56175674480830603548+002
8	7.21806867707525215541+001	9	1.017385095004887588+002	10	1.3217488271172953371+002	11	1.56175674480830603548+002	12	1.8217629543336440410+002
9	9.01605503723719826533+001	10	1.321790012064979061239+002	11	1.56179155753082818591+002	12	1.8217629543336440410+002	13	2.10176791467361057851+002
10	1.10160449475402662016+002	11	1.321790012064979061239+002	12	1.56179155753082818591+002	13	2.10176791467361057851+002	14	2.4017719401938005208+002
11	1.32180374076213383374+002	12	1.56179155753082818591+002	13	2.1017937372228305039+002	14	2.4017719401938005208+002	15	2.72177525213129903015+002
12	1.56110316194857264793+002	13	2.1017937372228305039+002	14	2.40179452342785088130+002	15	2.72177525213129903015+002	16	3.06177800987635674002+002
13	1.82180270805107734841+002	14	2.40179452342785088130+002	15	2.72179516984993511073+002	16	3.06177800987635674002+002	17	3.42178033063636693215+002
14	2.10180234549412150280+002	15	2.72179516984993511073+002	16	3.06179570810144753527+002	17	3.42178033063636693215+002	18	3.80178230216798563435+002
15	2.40180205123317526463+002	16	3.06179570810144753527+002	17	3.42179616106066484411+002	18	3.80178230216798563435+002	19	4.20178399123779736420+002
16	2.72180160913096228914+002	17	3.42179616106066484411+002	18	3.80179654585688777905+002	19	4.20178399123779736420+002	20	4.6217854493753029099+002
17	3.0618010753884740942+002	18	3.80179654585688777905+002	19	4.20179667552214857521+002	20	4.6217854493753029099+002	21	5.06178671686572803449+002
18	3.42180143786795030237+002	19	4.20179667552214857521+002	20	4.62179716011426095077+002	21	5.06178671686572803449+002	22	5.5217892557262206727+002
19	3.80180129376027156421+002	20	4.62179716011426095077+002	21	5.06179740749624063442+002	22	5.5217892557262206727+002	23	6.0017880096674190278+002
20	4.20180117029474089742+002	21	5.06179740749624063442+002	22	5.52179762308728058253+002	23	6.0017880096674190278+002	24	6.50178966360636182017+002
21	4.62180106370227437359+002	22	5.52179762308728058253+002	23	6.00179781425879494871+002	24	6.50178966360636182017+002	25	7.0217904302345614402+002
22	5.06180097134910126409+002	23	6.00179781425879494871+002	24	6.50179826332736780606+002	25	7.0217904302345614402+002	26	7.5617911458910705972+002
23	5.5218008495706136659+002	24	6.50179826332736780606+002	25	7.56179826332736780606+002	26	7.5617911458910705972+002	27	8.1217917280452445696+002
24	6.00180081863528071513+002	25	7.56179826332736780606+002	26	7.56179826332736780606+002	27	8.1217917280452445696+002	28	8.7017922800709386092+002
25	6.50180075563190974933+002	26	7.56179826332736780606+002	27	8.121798354655414265+002	28	8.7017922800709386092+002	29	9.3017927786057070838+002
26	7.0218006495847351671+002	27	8.121798354655414265+002	28	8.70179849328700111087+002	29	9.3017927786057070838+002	30	9.9217932303462202769+002
27	7.5618006495847351671+002	28	8.121798354655414265+002	29	8.70179849328700111087+002	30	9.3017927786057070838+002	31	1.05617936409727044841+003
28	8.1218006495847351671+002	29	8.70179849328700111087+002	30	9.30179859058739816556+002	31	9.9217932303462202769+002	32	1.1221794015328676132+003
29	8.7018006495847351671+002	30	9.30179859058739816556+002	31	9.92179867587577601786+002	32	1.05617936409727044841+003	33	1.1901784357564640808+003
30	9.3018006495847351671+002	31	9.92179867587577601786+002	32	1.05617987589775778266+003	33	1.1221794015328676132+003	34	1.26017946712537973623+003
31	9.9218006495847351671+002	32	1.05617987589775778266+003	33	1.12217988319617314261+003	34	1.26017946712537973623+003	35	1.33217949959485809018+003
32	1.0561800463734927361+003	33	1.12217988319617314261+003	34	1.26017989599801312168+003	35	1.33217949959485809018+003	36	1.4061795224943289933+003
33	1.1221800463734927361+003	34	1.26017989599801312168+003	35	1.3321799016234990261+003	36	1.4061795224943289933+003	37	1.48217954699642333157+003
34	1.2601800463734927361+003	35	1.3321799016234990261+003	36	1.4061799016234990261+003	37	1.48217954699642333157+003	38	1.56017959060305314949+003
35	1.3321800463734927361+003	36	1.4061799016234990261+003	37	1.48217991158661616590+003	38	1.56017959060305314949+003	39	1.6401796106532066876+003
36	1.4061800463734927361+003	37	1.48217991158661616590+003	38	1.56017991158661616590+003	39	1.6401796106532066876+003	40	1.7221796106532066876+003
37	1.4821800463734927361+003	38	1.56017991158661616590+003	39	1.64017991158661616590+003	40	1.7221796106532066876+003	41	1.80617962830606378893+003
38	1.5601800463734927361+003	39	1.64017991158661616590+003	40	1.72217992745997025723+003	41	1.80617962830606378893+003	42	1.89217964520915640701+003
39	1.6401800463734927361+003	40	1.72217992745997025723+003	41	1.80617992745997025723+003	42	1.89217964520915640701+003	43	1.9801796698469589412+003
40	1.7221800463734927361+003	41	1.80617992745997025723+003	42	1.892179930383391696195+003	43	1.9801796698469589412+003	44	2.07017967573080191270+003
41	1.8061800463734927361+003	42	1.892179930383391696195+003	43	1.980179930383391696195+003	44	2.07017967573080191270+003	45	2.16217968953514701523+003
42	1.8921800463734927361+003	43	1.980179930383391696195+003	44	2.070179930383391696195+003	45	2.16217968953514701523+003	46	2.25617971462466503563+003
43	1.9801800463734927361+003	44	2.070179930383391696195+003	45	2.162179930383391696195+003	46	2.25617971462466503563+003	47	2.35217971462466503563+003
44	2.0701800463734927361+003	45	2.162179930383391696195+003	46	2.25617994433021992438+003	47	2.35217971462466503563+003	48	2.4501797367909202265+003
45	2.1621800463734927361+003	46	2.25617994433021992438+003	47	2.35217994433021992438+003	48	2.4501797367909202265+003	49	2.55017994462914337607+003
46	2.2561800463734927361+003	47	2.35217994433021992438+003	48	2.45017994462914337607+003	49	2.55017994462914337607+003	50	2.65217974691772904727+003
47	2.3521800463734927361+003	48	2.45017994462914337607+003	49	2.55017994462914337607+003	50	2.65217974691772904727+003	51	
48	2.4501800463734927361+003	49	2.55017994462914337607+003	50		51			
49	2.5501800463734927361+003	50		51					
50	2.6521800463734927361+003	51							

PROBATE EIGENVALUES $\mu = 0.70$

$\mu = 0$			$\mu = 1$			$\mu = 2$		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	1.5983234450001/263257+001	1	2.096916620181992900103+000	2	6.069537542356621136704+000	2	6.069537542356621136704+000	2
1	2.292346580/432027+631+000	2	6.70906839617344736069+000	3	1.216279589650896618950+001	3	1.216279589650896618950+001	3
2	6.2590469479845749324+000	3	1.22289805569059300491+001	4	2.01972177405987565131+001	4	2.01972177405987565131+001	4
3	1.225124223240246949165+001	4	2.02357387429111775280+001	5	3.02136505702622665750+001	5	3.02136505702622665750+001	5
4	2.02466086618116/06264+001	5	3.0238931139494678966+001	6	4.22228102629000027619+001	6	4.22228102629000027619+001	6
5	3.0247365457360496661+001	6	4.2240706172726080063+001	7	5.62264516177260267291+001	7	5.62264516177260267291+001	7
6	4.22466733750226837266+001	7	5.6241798406275546852+001	8	7.22321773343221432808+001	8	7.22321773343221432808+001	8
7	5.624624833137317/6189+001	8	7.22425194580025784751+001	9	9.023474687606576740+45+001	9	9.023474687606576740+45+001	9
8	7.22459672850990539438+001	9	9.024320879903125776+001	10	1.0236644922858329364+002	10	1.0236644922858329364+002	10
9	9.02457718124107616753+001	10	1.0243383856908157326+002	11	1.32238047365485414100+002	11	1.32238047365485414100+002	11
10	1.0245630292664640701+002	11	1.32243655167324128117+002	12	1.5623912344949757761+002	12	1.5623912344949757761+002	12
11	1.32245524504149552015+002	12	1.56243866333988755512+002	13	1.8239967291194061422+002	13	1.8239967291194061422+002	13
12	1.5624544331734742287+002	13	1.82244026500822821674+002	14	2.10240641319874591752+002	14	2.10240641319874591752+002	14
13	1.82245379676762464220+002	14	2.10244156940274479020+002	15	2.40241188285766907364+002	15	2.40241188285766907364+002	15
14	2.102453238330607418138+002	15	2.4024262739651778013+002	16	2.72241618269617385678+002	16	2.72241618269617385678+002	16
15	2.4024528756885428242+002	16	2.72244349778631365462+002	17	3.06242012940128807353+002	17	3.06242012940128807353+002	17
16	2.72245253622657688291+002	17	3.06244422249208720707+002	18	3.4224233229548702506+002	18	3.4224233229548702506+002	18
17	3.0624522537617464814+002	18	3.42244493233491007653+002	19	3.802425566665695119417+002	19	3.802425566665695119417+002	19
18	3.42245201571985588235+002	19	3.80244533038857699404+002	20	4.20242825522709508781+002	20	4.20242825522709508781+002	20
19	3.80245181366040878531+002	20	4.20244579420613306194+002	21	4.62243023630404170478+002	21	4.62243023630404170478+002	21
20	4.2024516405531403903+002	21	4.6224461773335938821+002	22	5.06243195782189278901+002	22	5.06243195782189278901+002	22
21	4.6224514811161011235+002	22	5.06244651036032797938+002	23	5.5224336388824030304+002	23	5.5224336388824030304+002	23
22	5.0624513621622134418+002	23	5.5224468016614167234+002	24	6.00243784423080884+002	24	6.00243784423080884+002	24
23	5.5224512479490254379+002	24	6.00244705793137408149+002	25	6.50243596061724716745+002	25	6.50243596061724716745+002	25
24	6.00245114763477627341+002	25	6.50244728457316725159+002	26	7.02243700195878595337+002	26	7.02243700195878595337+002	26
25	6.502451092306756148+002	26	7.0224474856643676622+002	27	7.56243793154022835519+002	27	7.56243793154022835519+002	27
26	7.0224509806671004396+002	27	7.5624476657630642595+002	28	8.12243876480749826536+002	28	8.12243876480749826536+002	28
27	7.5624509105341893453+002	28	8.12244782695066227061+002	29	8.70243931462635223859+002	29	8.70243931462635223859+002	29
28	8.12245084766708212957+002	29	8.7024479719775866506+002	30	9.30244019178302426180+002	30	9.30244019178302426180+002	30
29	8.70245079139719495844+002	30	9.3024481095064990923+002	31	9.9224408053750547370+002	31	9.9224408053750547370+002	31
30	9.30245074000440756813+002	31	9.92244823182699422285+002	32	1.05624413631190034887+003	32	1.05624413631190034887+003	32
31	9.92245069371519093371+002	32	1.05624483295053338319+003	33	1.12224418715946575713+003	33	1.12224418715946575713+003	33
32	1.05624506516395950213+003	33	1.12224484278523318750+003	34	1.19024423364402867906+003	34	1.19024423364402867906+003	34
33	1.1222450113272626988+003	34	1.19024485177605402746+003	35	1.26024427625099518888+003	35	1.26024427625099518888+003	35
34	1.190245078201215313+003	35	1.2602448601688060032+003	36	1.332244431540004106966+003	36	1.332244431540004106966+003	36
35	1.260245039460356618044+003	36	1.33224486756889347166+003	37	1.406244351455660100309+003	37	1.406244351455660100309+003	37
36	1.3322450316519088595+003	37	1.40624487456257160317+003	38	1.48224438473528966991+003	38	1.48224438473528966991+003	38
37	1.40624504893161611492+003	38	1.48224488099935523653+003	39	1.56024444551697910756+003	39	1.56024444551697910756+003	39
38	1.48224504642375319114+003	39	1.56024486099935523653+003	40	1.640244444044661432684+003	40	1.640244444044661432684+003	40
39	1.560245040983424626+003	40	1.6402448927063918745+003	41	1.72224447053306649332+003	41	1.72224447053306649332+003	41
40	1.64024504194601300165+003	41	1.7222448927063918745+003	42	1.80624449517219489481+003	42	1.80624449517219489481+003	42
41	1.72224503994752457426+003	42	1.80624490235944882244+003	43	1.89224451813026178147+003	43	1.89224451813026178147+003	43
42	1.80624503808855905621+003	43	1.892244967996667625+003	44	1.98024453955681529847+003	44	1.98024453955681529847+003	44
43	1.9802450365642369597+003	44	1.980244967996667625+003	45	2.07024455958513315144+003	45	2.07024455958513315144+003	45
44	1.9802450347398363873+003	45	2.07024491481782555044+003	46	2.16224457833430187738+003	46	2.16224457833430187738+003	46
45	2.07024503322874133689+003	46	2.16224491481782555044+003	47	2.256244921843758958427+003	47	2.256244921843758958427+003	47
46	2.16224503161413416555+003	47	2.256244921843758958427+003	48	2.3522449250308737386+003	48	2.3522449250308737386+003	48
47	2.2562450304802705807+003	48	2.3522449250308737386+003	49	2.45024492803480315611+003	49	2.45024492803480315611+003	49
48	2.3522450292431332741+003	49	2.45024492803480315611+003	50	2.5502444642517152460+003	50	2.5502444642517152460+003	50
49	2.45024502867297196153+003	50	2.5502444642517152460+003	51	2.652244465627136159492+003	51	2.652244465627136159492+003	51

PROLATE EIGENVALUES $M = 0.90$

$M = 0$		$M = 1$		$M = 2$	
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
0	2.002334963105251037051-001	1	2.15908455919908142471-000	2	6.11445798221722579240-000
1	2.44146971068888386987-000	2	6.3446032721147906717-000	3	1.226853340952669157343-001
2	6.43068493999299892940-000	3	1.23788335014940544815-001	4	2.03259473013303545147-001
3	1.2416191949373691336-001	4	2.038999446695096017-001	5	3.03532409223498204513-001
4	2.41142771678074913223-001	5	3.03951972879822706479-001	6	4.23684078198661917371-001
5	2.14092035032283793112-001	6	4.23980753300997097546-001	7	5.6377331143914546174-001
6	4.28079713877829483683-001	7	5.63998415436674585290-001	8	7.2383808963031914183-001
7	2.6407214449226229150-001	8	7.24010037081463773821-001	9	9.03881549205098761400-001
8	7.24067151937366117204-001	9	9.04018144184224550917-001	10	1.1039124737131705353-002
9	4.0463632024213591517-001	10	1.1040399423792268356-002	11	1.32393557575932801170-002
10	1.1049611713673929491-002	11	1.32402836459430361410-002	12	1.56395330297133767619-002
11	1.32405223477986210200-002	12	1.56403171647342556010-002	13	1.82396719754906713218-002
12	1.5640575545086437475-002	13	1.82403434407398257499-002	14	2.10397829374774564490-002
13	1.82405672696311298004-002	14	2.10403644236095960613-002	15	2.4039872969806627121-002
14	2.1040558259388664969-002	15	2.4040381474658815603-002	16	2.72399470235083224512-002
15	2.4040559440386431150-002	16	2.72403954505232760783-002	17	3.06400086784347368704-002
16	2.7240544928299480374-002	17	3.06404071832334757489-002	18	3.42400605569307487106-002
17	3.06405399172945353848-002	18	3.424041691736235911518-002	19	3.80401046238926420026-002
18	3.424053370529225646-002	19	3.80404252493322050291-002	20	4.20401423738278674272-002
19	3.80405321252432886912-002	20	4.204032367913398827-002	21	4.62401749599027418379-002
20	4.204052735344613543-002	21	4.6240385478399109694-002	22	5.06402032834671193533-002
21	4.62405264109054834353-002	22	5.0640443959250560749-002	23	5.5202280573176345654-002
22	5.0640524109733154348-002	23	5.520448568345146623-002	24	6.00402488511540632324-002
23	5.52040528064211963835-002	24	6.00404527072940091596-002	25	6.5040269124738222345-002
24	6.0040513761975979367-002	25	6.5040563512391876367-002	26	7.0240286252418225981-002
25	6.5040518760224173704-002	26	7.0240459584538228387-002	27	7.56403015414954358139-002
26	7.02405173685854518706-002	27	7.5640624600425459590-002	28	8.12403152461423441959-002
27	7.5640516126309311663-002	28	8.1240465710647711603-002	29	8.70403275780604625087-002
28	8.12405120127030066772-002	29	8.70404674125482677880-002	30	9.3040338714739968422-002
29	8.7040514010773745188-002	30	9.304069508049048634-002	31	9.92403488058145619650-002
30	9.30405131058755307753-002	31	9.924071456679726845-002	32	1.0564035797828697634-003
31	9.92405132859281566640-002	32	1.0564047315000868185-003	33	1.12240366340389381633-003
32	1.0564051544001672064-003	33	1.12240474730937486626-003	34	1.19040373984876980304-003
33	1.12240518601149713151-003	34	1.19040476176192226350-003	35	1.2604038991599755609-003
34	1.19040510235964849992-003	35	1.2604047750086939323-003	36	1.332403874299922392-003
35	1.2604050670945516705-003	36	1.3324047871802270575-003	37	1.40640393358818245263-003
36	1.3324050914751466427-003	37	1.40640479436985336084-003	38	1.48240398831503238291-003
37	1.4064050659654849992-003	38	1.482404807363597589-003	39	1.5640403893360614610-003
38	1.4824050670945516705-003	39	1.5640481430614070355-003	40	1.6404048584513551060-003
39	1.5640481430614070355-003	40	1.6404048271750752665-003	41	1.7224040429940309544059-003
40	1.6404050670945516705-003	41	1.7224048354098545054-003	42	1.80640420767173812137-003
41	1.7224050670945516705-003	42	1.8064048406990134972-003	43	1.892404024290515204265-003
42	1.8064050670945516705-003	43	1.8924045826714586570-003	44	1.98040424290515204265-003
43	1.8924050670945516705-003	44	1.9804045826714586570-003	45	2.07040427583915029989-003
44	1.9804050670945516705-003	45	2.0704045826714586570-003	46	2.16240430666959109079-003
45	2.0704050670945516705-003	46	2.16240486309458703346-003	47	2.25640433557191093922-003
46	2.1624050670945516705-003	47	2.25640486309458703346-003	48	2.35240436270362864863-003
47	2.2564050670945516705-003	48	2.35240486309458703346-003	49	2.45040438820649478061-003
48	2.3524050670945516705-003	49	2.45040486309458703346-003	50	2.55240441220835423363-003
49	2.4504050670945516705-003	50	2.55240486309458703346-003	51	2.65240443482474690447-003
50	2.5524050670945516705-003	51	2.65240486309458703346-003		

PROLATE EIGENVALUES $M = 1.00$ $M = 0$ $M = 1$ $M = 2$

L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
0	3.190005514689273784001	1	2.19554835541300395688000	2	6.14094899135769050915000
1	2.580845799771440120000	2	6.4269944377513472003000	3	1.2311015129920257994001
2	6.534713309579651490001	3	1.246791330391497025001	4	2.04023530495188713150001
3	1.251442145094067009001	4	2.04816960130331905116001	5	3.04361453887136587895001
4	2.0508274362570305272001	5	3.0488065794948845572001	6	4.24548891610704798408001
5	3.050540453221769329001	6	4.24915779512822460656001	7	5.64663980856690717215001
6	4.25038161265975041594001	7	5.649329742318565733001	8	7.247398387938874786001
7	5.6502844502371194234001	8	7.2495146602267418605001	9	9.047925334039100737001
8	7.250222716168495622001	9	9.04961302331647070972001	10	1.10483064544958302719002
9	9.0501735363145603763001	10	1.104968414551420332671002	11	1.3248591149420332671002
10	1.10501434269112872618002	11	1.32497372611392544646002	12	1.56488094776860076428002
11	1.32501193275106366288002	12	1.5649779487899487128002	13	1.8248980615421270884002
12	1.56501094432431694544002	13	1.82498099100841022327002	14	2.1049117269177016997002
13	1.8250086352132145273002	14	2.1049835973073254067002	15	2.40492281329076912912002
14	2.10500747803944212135002	15	2.4049856732643491059002	16	2.72493193199432566337002
15	2.4050065391412619099002	16	2.7249673078774493403002	17	3.06493952316362001041002
16	2.7250057668263102704002	17	3.0649882350731392221002	18	3.42494591026860081526002
17	3.06500512384859703002	18	3.42498991456452105165002	19	3.80495133539080046628002
18	3.425004584282364184002	19	3.8049902620841072015002	20	4.2049598263119841975002
19	3.8050041232642744514002	20	4.2049917927807382105002	21	4.6249599940315959989002
20	4.20500372956345674344002	21	4.62499254077543011172002	22	5.06496348060575611529002
21	4.62500309437801595877002	22	5.06499359089011386428002	23	5.5249665301378908844002
22	5.06500283601944265429002	23	5.52499375952109825767002	24	6.00496921278457431724002
23	5.52500260873927213930002	24	6.00499452972856545512002	25	6.50497158516085516671002
24	6.0050026774132858739002	25	6.50499470207885173461002	26	7.02497369336081334787002
25	6.5050022291219194973002	26	7.02499509516812131297002	27	7.564975572239949744002
26	7.02500206967714152730002	27	7.564995446056274639377002	28	8.12497726203983998429002
27	7.5650019267552165995002	28	8.12499576057467679517002	29	8.70497877987749370551002
28	8.12500179814958635738002	29	8.70499604357436900699002	30	9.30498015058500670724002
29	8.70500157677137499026002	30	9.30499659146761243979002	31	9.9249813925898222461002
30	9.305001481114160308003	31	1.05499674211899259003	32	1.0549825215210608715003
31	1.055001393908082601003	32	1.1249969331036508038003	33	1.1249835507045807568003
32	1.1250013141857195944003	33	1.19049844915987543145003	34	1.19049844915987543145003
33	1.1905001241144127597003	34	1.26049853539130898653003	35	1.26049853539130898653003
34	1.26050011739741429829003	35	1.33249861462664265450003	36	1.33249861462664265450003
35	1.3325001121997876205003	36	1.40849868759974574435003	37	1.40849868759974574435003
36	1.40850011055086479951003	37	1.48249875495373841207003	38	1.48249875495373841207003
37	1.48250010227758764326003	38	1.56049881725122940870003	39	1.56049881725122940870003
38	1.56050009079290788880003	39	1.64049887498611821936003	40	1.64049887498611821936003
39	1.64050008656752160502003	40	1.72249892859342650582003	41	1.72249892859342650582003
40	1.7225000792907820078880003	41	1.80849897845752623662003	42	1.80849897845752623662003
41	1.808500062630947040003	42	1.89249902491905657855003	43	1.89249902491905657855003
42	1.892500055214144118003	43	1.98049910881244695569003	44	1.98049910881244695569003
43	1.98050004789506322515003	44	2.0749914675517604577003	45	2.0749914675517604577003
44	2.0749914675517604577003	45	2.16249916232488095135003	46	2.16249916232488095135003
45	2.16250007230617172640003	46	2.2549921571543663640003	47	2.2549921571543663640003
46	2.2549921571543663640003	47	2.3504992766398582640003	48	2.3504992766398582640003
47	2.3504992766398582640003	48	2.45049930447327340889003	49	2.45049930447327340889003
48	2.45049930447327340889003	49	2.55249930447327340889003	50	2.55249930447327340889003
49	2.55249930447327340889003	50	2.65249930447327340889003	51	2.65249930447327340889003

PRBLATE EIGENVALUES M = 1.20

M = 0		M = 1		M = 2	
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
0	4.5072835339376850187-001	1	2.278055476163953261-000	2	6.20178917229191076015-000
1	2.8456106545907920031-000	2	6.60912767990295789283-000	3	1.247533838972742210978-001
2	6.77386520978973504-000	3	1.2674486167051525254-001	4	2.05792068409012632965-001
3	1.272896819026841750-001	4	2.0694744231390916830-001	5	3.06281967867304330815-001
4	1.27230453480284281296-001	5	2.0733733611288149505-001	6	4.2655294233367133332-001
5	3.0726503326268763-001	6	4.2708951671455355457-001	7	5.6621823787674298349-001
6	4.2726597335247763739-001	7	5.67112980816744417935-001	8	7.26827261316393682339-001
7	5.6724465016749444273-001	8	7.2713270579447867459-001	9	9.06902901419496091970-001
8	7.27234560356462725987-001	9	9.071437755400828348-001	10	1.10695755579270119862-002
9	9.0722755611471607968-001	10	1.10715625226445368839-002	11	1.32699837385685025934-002
10	1.1072224517354654629-002	11	1.32711562108061685742-002	12	1.56702965432286495080-002
11	1.3272187095592734028-002	12	1.5671492679560161188-002	13	1.8270541647953752390-002
12	1.567215609468904652-002	13	1.82712369182460351921-002	14	2.10707373084015048690-002
13	1.8272135364362114530-002	14	2.107172227650886055-002	15	2.40708960061811919752-002
14	2.1072117153545661934-002	15	2.4071800834713081645-002	16	2.72710265128528577119-002
15	2.4072102492332001589-002	16	2.7271824103472983615-002	17	3.06711351405754385444-002
16	2.7272090382853067357-002	17	3.067184408970618055-002	18	3.4271226265496002609-002
17	3.0672080302206924555-002	18	3.4271860454649012558-002	19	3.8071304140011440171-002
18	3.42720715206822513962-002	19	3.4271874455726934940-002	20	4.20713708186282080680-002
19	3.80720646167218391722-002	20	4.20718864876589214314-002	21	4.6271427669438283575-002
20	4.20720584457927082325-002	21	4.6271996837660347980-002	22	5.06714778647580050297-002
21	4.6272052119241635533-002	22	5.067195832646819616-002	23	5.5271521478984459541-002
22	5.06720484896295201492-002	23	5.5271513659438719011-002	24	6.0071559843987122630-002
23	5.527204440374270011-002	24	6.0071520619268924566-002	25	6.50715937701561349509-002
24	6.0072046783055725062-002	25	6.50715267383601997964-002	26	7.027162339172174161072-002
25	6.5072037128240525951-002	26	7.0271532157438099167-002	27	7.56716504266575930167-002
26	7.02720334528965774378-002	27	7.5671570291134474805-002	28	8.1271674462862793999-002
27	7.56720323025580486-002	28	8.1271641379258528540-002	29	8.7071696649019296352-002
28	8.1272030190454252579-002	29	8.70716452534586256439-002	30	9.30717162475338768263-002
29	8.70720281751298721509-002	30	9.3071648828107951957-002	31	9.92717340059163316-002
30	9.30720263551287864962-002	31	9.9271520207634422303-002	32	1.05671750146195442839-003
31	9.9272024060215981298-002	32	1.05671954541756748640-003	33	1.12271764860568578394-003
32	1.0567202207054920601-003	33	1.1227195759547377353-003	34	1.19071778311838256851-003
33	1.1227202184053925760-003	34	1.190719600213373984597-003	35	1.26071790640598674016-003
34	1.1907202059129676276-003	35	1.26071962244819268588-003	36	1.3327180196805968456-003
35	1.2607201846291421073-003	36	1.33271964287734717915-003	37	1.40871814200791110890-003
36	1.3327201539423287425-003	37	1.408719666169155193985-003	38	1.48271822029730659933-003
37	1.40872017425321507433-003	38	1.48271967505670488853-003	39	1.56071830935684105493-003
38	1.482720165310384344-003	39	1.56071969511792899510-003	40	1.64071831978258258171-003
39	1.560720170386248456-003	40	1.6407197100262177940-003	41	1.72271846852735548381-003
40	1.640720149378439406-003	41	1.72271972382297499684-003	42	1.80571853981007945557-003
41	1.7227201422551034654-003	42	1.8057197367813611331-003	43	1.8927186062209790164-003
42	1.805720156343761611-003	43	1.8927197465595953082-003	44	1.98071868821431488739-003
43	1.89272012946542241093-003	44	1.98071975583450816973-003	45	2.07071872615451834609-003
44	1.98072012370807370733-003	45	2.07071977028337660583-003	46	2.1627187803940375538-003
45	2.070720118332647615841-003	46	2.162719780647264262-003	47	2.25671883123971793063-003
46	2.1627201132886110120-003	47	2.2567197852342515399-003	48	2.35271887897064684465-003
47	2.2567201085658675596-003	48	2.35271979784192416047-003	49	2.45071982338370542968-003
48	2.3527201641324432406-003	49	2.4507198593275441988-003	50	2.55071986605960646382-003
49	2.4507200996515255851-003	50	2.550719881547373100502-003	51	2.652719900584288880632-003

PROBATE EIGENVALUES M = 1.40

M = 1

L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
0	6.0009421803801633327-001	1	2.37532482256615295801+000	2	6.27279442548792184331+000
1	3.146219259547187512891+000	2	6.82518342611044571711+000	3	1.26448873479067534163+001
2	7.30419260945827444976+000	3	1.29490511612525847263+001	4	2.0788044467768281570+001
3	1.3014835604217450+000	4	2.09462834689981717332+001	5	3.08552723162747607804+001
4	2.0995927371130535+123+001	5	3.09582647148434867339+001	6	4.2892214716297522002+001
5	3.09922233477837290+001	6	4.29447475257431897671+001	7	5.691473830398043295+001
6	4.298867412138526787+001	7	5.69487817462032635366+001	8	7.2925696922682755255+001
7	5.698471004010545123+001	8	7.291257685953558551+001	9	9.039827286429680379+001
8	7.2985115812395384371+001	9	5.09730394597035555852+001	10	1.10947232840862503728+002
9	9.00841139421211313+001	10	1.10743324540802596155+002	11	1.329525712194381916+002
10	1.109833570948151+000+002	11	1.329752852471721742+002	12	1.5695689824574622646+002
11	1.3298275212359630+373+002	12	1.56976016185591616738+002	13	1.82960303949347639631+002
12	1.569823504233350587+002	13	1.8297659433558190701+002	14	2.1096204911057310583+002
13	1.82980196720359177+002	14	2.107704842115482954+002	15	2.40965093956877186641+002
14	2.109814477854738762+002	15	2.407742011092054962+002	16	2.72966857392743519822+002
15	2.40981525010434907876+002	16	2.7297725473680130827+002	17	3.0696832492334264008+002
16	2.729813422133185585+002	17	3.069797562900930388+002	18	3.3296955932681514045+002
17	3.06981157883807461894+002	18	3.32977813266005427693+002	19	3.80970807554903480581+002
18	3.429810713866526773+002	19	3.8078374722465772445+002	20	4.2097195299859859092+002
19	3.80981963832981643+002	20	4.207853011712720255+002	21	4.82972880076720647092+002
20	4.209867173608253065+002	21	4.62978664218211367625+002	22	5.06972953383020562179+002
21	4.629875222028028392+002	22	5.06978780750135196878+002	23	5.52973542213360369397+002
22	5.069872322475503967+002	23	5.5297888256354722377+002	24	6.00974060137529933521+002
23	5.52986628192337771+002	24	6.0097973288177857995+002	25	6.509745113654948663+002
24	6.009875683037997718+002	25	6.50979501542288810406+002	26	7.02974925054418274574+002
25	6.50985626405430211+002	26	7.0297912162379043151+002	27	7.56975288275837635238+002
26	7.02984523987435492+002	27	7.5697818415206236567+002	28	8.12975613827589280968+002
27	7.569846366729445759+002	28	8.1297524114814264281+002	29	8.7097590674737119453+002
28	8.1298452025959182954+002	29	8.7097529133460775090+002	30	9.309761712575567126020+002
29	8.70984620199180764023+002	30	9.30975337601990219013+002	31	9.92976410918700278538+002
30	9.30984353053145855274+002	31	9.9297537070117352824+002	32	1.05697462875019887329+003
31	9.92984364564057192+002	32	1.05697941676049629885+003	33	1.12297482732620418427+003
32	1.0569802460953212366+003	33	1.122979451196844931+003	34	1.19097700885214538745+003
33	1.12298022571789359008+003	34	1.19097948252640437288+003	35	1.26097717522637408957+003
34	1.1909802708592801955+003	35	1.2609795131221729876+003	36	1.33297732809010029163+003
35	1.260980250007086057+003	36	1.3329795776017016593+003	37	1.40697746886810135113+003
36	1.33298022743178840513+003	37	1.408979562168443312+003	38	1.48297759880210294366+003
37	1.40898025986725575054+003	38	1.48297958359713576491+003	39	1.56097771897830223579+003
38	1.48298024652555621807+003	39	1.5609796538901915283+003	40	1.64097783035017966595+003
39	1.5609802341932281208+003	40	1.6409796465749823899+003	41	1.72297793375749928923+003
40	1.6409802227604555492+003	41	1.7229796425478945820+003	42	1.80697802994228070626+003
41	1.72298021214516507562+003	42	1.8069796518860012495+003	43	1.8929781195618173930+003
42	1.80698022711405833+003	43	1.89297967469339064981+003	44	1.98097820320060607415+003
43	1.8929801530709427248+003	44	1.98097968516337855428+003	45	2.07097828137934225380+003
44	1.9809801448461245634+003	45	2.0709797026886677850+003	46	2.16297835456324188865+003
45	2.0709801764587150199+003	46	2.16297971534976178664+003	47	2.25697842310901939059+003
46	2.1629801684550712998+003	47	2.25697972721876559916+003	48	2.35297848075080706655+003
47	2.25698016190222441215+003	48	2.35297973636041614747+003	49	2.45097854810527873137+003
48	2.3529801552904709495+003	49	2.4509797483826768482+003	50	2.55097860507605721773+003
49	2.450980149075665467946+003	50	2.55097974568895733881080+003		

M = 2

L	EIGENVALUE	L	EIGENVALUE
2	6.27279442548792184331+000	2	6.27279442548792184331+000
3	1.26448873479067534163+001	3	1.26448873479067534163+001
4	2.0788044467768281570+001	4	2.0788044467768281570+001
5	3.08552723162747607804+001	5	3.08552723162747607804+001
6	4.2892214716297522002+001	6	4.2892214716297522002+001
7	5.691473830398043295+001	7	5.691473830398043295+001
8	7.2925696922682755255+001	8	7.2925696922682755255+001
9	9.039827286429680379+001	9	9.039827286429680379+001
10	1.10947232840862503728+002	10	1.10947232840862503728+002
11	1.329525712194381916+002	11	1.329525712194381916+002
12	1.5695689824574622646+002	12	1.5695689824574622646+002
13	1.82960303949347639631+002	13	1.82960303949347639631+002
14	2.1096204911057310583+002	14	2.1096204911057310583+002
15	2.40965093956877186641+002	15	2.40965093956877186641+002
16	2.72966857392743519822+002	16	2.72966857392743519822+002
17	3.0696832492334264008+002	17	3.0696832492334264008+002
18	3.3296955932681514045+002	18	3.3296955932681514045+002
19	3.80970807554903480581+002	19	3.80970807554903480581+002
20	4.2097195299859859092+002	20	4.2097195299859859092+002
21	4.82972880076720647092+002	21	4.82972880076720647092+002
22	5.06972953383020562179+002	22	5.06972953383020562179+002
23	5.52973542213360369397+002	23	5.52973542213360369397+002
24	6.00974060137529933521+002	24	6.00974060137529933521+002
25	6.509745113654948663+002	25	6.509745113654948663+002
26	7.02974925054418274574+002	26	7.02974925054418274574+002
27	7.56975288275837635238+002	27	7.56975288275837635238+002
28	8.12975613827589280968+002	28	8.12975613827589280968+002
29	8.7097590674737119453+002	29	8.7097590674737119453+002
30	9.309761712575567126020+002	30	9.309761712575567126020+002
31	9.92976410918700278538+002	31	9.92976410918700278538+002
32	1.05697462875019887329+003	32	1.05697462875019887329+003
33	1.12297482732620418427+003	33	1.12297482732620418427+003
34	1.19097700885214538745+003	34	1.19097700885214538745+003
35	1.26097717522637408957+003	35	1.26097717522637408957+003
36	1.33297732809010029163+003	36	1.33297732809010029163+003
37	1.40697746886810135113+003	37	1.40697746886810135113+003
38	1.48297759880210294366+003	38	1.48297759880210294366+003
39	1.56097771897830223579+003	39	1.56097771897830223579+003
40	1.64097783035017966595+003	40	1.64097783035017966595+003
41	1.72297793375749928923+003	41	1.72297793375749928923+003
42	1.80697802994228070626+003	42	1.80697802994228070626+003
43	1.8929781195618173930+003	43	1.8929781195618173930+003
44	1.98097820320060607415+003	44	1.98097820320060607415+003
45	2.07097828137934225380+003	45	2.07097828137934225380+003
46	2.16297835456324188865+003	46	2.16297835456324188865+003
47	2.25697842310901939059+003	47	2.25697842310901939059+003
48	2.35297848075080706655+003	48	2.35297848075080706655+003
49	2.45097854810527873137+003	49	2.45097854810527873137+003
50	2.55097860507605721773+003	50	2.55097860507605721773+003

PROLATE EIGENVALUES M = 1.00

M = 0			M = 1			M = 2		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0		1		2		3		4
1	7.6447191044120998-177.001	2	7.0719276415864599228.000	3	7.0719276415864599228.000	4	6.35355210875272741379.000	5
2	3.4901587026978427.477.000	3	3.320170244194395359.001	4	3.320170244194395359.001	5	1.26308396153676354269.001	6
3	7.39912524431076308.000	4	3.320170244194395359.001	5	3.320170244194395359.001	6	2.1027920151379919036.001	7
4	1.333650647077846.126.001	5	3.320170244194395359.001	6	3.320170244194395359.001	7	3.1174131051339950.001	8
5	2.13042656080505.387.001	6	3.320170244194395359.001	7	3.320170244194395359.001	8	4.168673787237376523.001	9
6	3.129426723576927.722.001	7	3.320170244194395359.001	8	3.320170244194395359.001	9	5.19529083118429346781.001	10
7	4.329252450663891670.001	8	3.320170244194395359.001	9	3.320170244194395359.001	10	7.32145870577346844785.001	11
8	5.728960675387463.195.001	9	3.320170244194395359.001	10	3.320170244194395359.001	11	9.122792924457.0295.027.001	12
9	7.328743129377.1563.177.001	10	3.320170244194395359.001	11	3.320170244194395359.001	12	1.1123794596922049580.002	13
10	9.12855206090019.116.001	11	3.320170244194395359.001	12	3.320170244194395359.001	13	1.33244719681845258229.002	14
11	1.112848304784411.204.002	12	3.320170244194395359.001	13	3.320170244194395359.001	14	1.572020.0168687965.0.002	15
12	1.33244719681845258229.002	13	3.320170244194395359.001	14	3.320170244194395359.001	15	1.8325450215979109950.002	16
13	1.572020.0168687965.0.002	14	3.320170244194395359.001	15	3.320170244194395359.001	16	2.1123793974220956.114.002	17
14	1.8325450215979109950.002	15	3.320170244194395359.001	16	3.320170244194395359.001	17	2.41280712506561918183.002	18
15	2.1123793974220956.114.002	16	3.320170244194395359.001	17	3.320170244194395359.001	18	2.732690332467221075.002	19
16	2.41280712506561918183.002	17	3.320170244194395359.001	18	3.320170244194395359.001	19	3.072648950841700235.002	20
17	2.732690332467221075.002	18	3.320170244194395359.001	19	3.320170244194395359.001	20	3.43266494536549174549.002	21
18	3.072648950841700235.002	19	3.320170244194395359.001	20	3.320170244194395359.001	21	3.81267851339203273234.002	22
19	3.43266494536549174549.002	20	3.320170244194395359.001	21	3.320170244194395359.001	22	4.212690132019273234.002	23
20	3.81267851339203273234.002	21	3.320170244194395359.001	22	3.320170244194395359.001	23	4.6327001580456550140.002	24
21	4.212690132019273234.002	22	3.320170244194395359.001	23	3.320170244194395359.001	24	5.07270807012669414026.002	25
22	4.6327001580456550140.002	23	3.320170244194395359.001	24	3.320170244194395359.001	25	5.53271648084677854052.002	26
23	5.07270807012669414026.002	24	3.320170244194395359.001	25	3.320170244194395359.001	26	6.0127231889619885374.002	27
24	5.53271648084677854052.002	25	3.320170244194395359.001	26	3.320170244194395359.001	27	6.5127231889619885374.002	28
25	6.0127231889619885374.002	26	3.320170244194395359.001	27	3.320170244194395359.001	28	7.03273437747182846467.002	29
26	6.5127231889619885374.002	27	3.320170244194395359.001	28	3.320170244194395359.001	29	7.57273907568662294174.002	30
27	7.03273437747182846467.002	28	3.320170244194395359.001	29	3.320170244194395359.001	30	8.13274328645166584500.002	31
28	7.57273907568662294174.002	29	3.320170244194395359.001	30	3.320170244194395359.001	31	8.71274707498677691081.002	32
29	8.13274328645166584500.002	30	3.320170244194395359.001	31	3.320170244194395359.001	32	9.3127504959506348596.002	33
30	8.71274707498677691081.002	31	3.320170244194395359.001	32	3.320170244194395359.001	33	9.9327535954272871254.002	34
31	9.3127504959506348596.002	32	3.320170244194395359.001	33	3.320170244194395359.001	34	1.05727564125033871565.003	35
32	9.9327535954272871254.002	33	3.320170244194395359.001	34	3.320170244194395359.001	35	1.12327589804851378216.003	36
33	1.05727564125033871565.003	34	3.320170244194395359.001	35	3.320170244194395359.001	36	1.19127613279147450308.003	37
34	1.12327589804851378216.003	35	3.320170244194395359.001	36	3.320170244194395359.001	37	1.26127634793365788540.003	38
35	1.19127613279147450308.003	36	3.320170244194395359.001	37	3.320170244194395359.001	38	1.332765460463716681.003	39
36	1.26127634793365788540.003	37	3.320170244194395359.001	38	3.320170244194395359.001	39	1.40727672764184103322.003	40
37	1.332765460463716681.003	38	3.320170244194395359.001	39	3.320170244194395359.001	40	1.48327689565377844869.003	41
38	1.40727672764184103322.003	39	3.320170244194395359.001	40	3.320170244194395359.001	41	1.5612770104567491122.003	42
39	1.48327689565377844869.003	40	3.320170244194395359.001	41	3.320170244194395359.001	42	1.6412793369782.05304.003	43
40	1.5612770104567491122.003	41	3.320170244194395359.001	42	3.320170244194395359.001	43	1.7232795493740640999.003	44
41	1.6412793369782.05304.003	42	3.320170244194395359.001	43	3.320170244194395359.001	44	1.8032795813812610287.003	45
42	1.7232795493740640999.003	43	3.320170244194395359.001	44	3.320170244194395359.001	45	1.89327980042925444984.003	46
43	1.8032795813812610287.003	44	3.320170244194395359.001	45	3.320170244194395359.001	46	1.9812796182056396599.003	47
44	1.89327980042925444984.003	45	3.320170244194395359.001	46	3.320170244194395359.001	47	2.0712777821534516623.003	48
45	1.9812796182056396599.003	46	3.320170244194395359.001	47	3.320170244194395359.001	48	2.1632779615368246596.003	49
46	2.0712777821534516623.003	47	3.320170244194395359.001	48	3.320170244194395359.001	50	2.25527804480145199667.003	51
47	2.1632779615368246596.003	48	3.320170244194395359.001	49	3.320170244194395359.001	51	2.35327804480145199667.003	
48	2.25527804480145199667.003	50	3.320170244194395359.001				2.451278196712128980534.003	
49	2.35327804480145199667.003						2.551278196712128980534.003	
50	2.451278196712128980534.003						2.65327828612103215671.003	
51	2.551278196712128980534.003							

UNROLLATE EIGENVALUES M = 1.80

M = 1			M = 2		
EIGENVALUE			EIGENVALUE		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
1	9.41200652748034945296-001	1	2.6039213659587408475-000	1	6.44361807194659755725+000
2	3.870275701387644-047+000	2	7.3483147327270524396+000	2	1.305687279777261405+001
3	7.7867495132561872-579+000	3	1.3522544903359867630+001	3	2.13011806687961719363+001
4	1.34927861182614347-605+001	4	2.158871042250441199+001	4	3.114659522000391058+001
5	1.1459304122861222-368+001	5	3.1587488265549902279+001	5	4.34762406350571230769+001
6	3.1645752640587882-890+001	6	4.35975426672384854102+001	6	5.75135190669761759599+001
7	4.363058565562404-909+001	7	5.76034276525098882010+001	7	7.353784839882678216+001
8	5.763144439410191-238+001	8	7.3672446620796723638+001	8	9.1155467014910944733+001
9	7.363139230225130-354+001	9	9.160968761028022580+001	9	1.1156677147464667851+002
10	9.162786594457373-347+001	10	1.11611753246254661560+002	10	1.33575781475095632020+002
11	1.11627529373587-379+002	11	1.33613154098512291827+002	11	1.5758674074523191630+002
12	1.336256147760927-014+002	12	1.57614224211429123560+002	12	1.835880665578752741+002
13	1.576247427656575-892+002	13	1.8361506060984010818+002	13	2.11592365960299867223+002
14	1.8362405572312134-729+002	14	2.11615726568915561491+002	14	2.415958492343973841+002
15	2.116251472320254-877+002	15	2.4161266595528224593+002	15	2.73598712329504052192+002
16	2.736207271925544-817+002	16	2.736167097742744403+002	16	3.07601093448321700141+002
17	3.0762270423464520-409+002	17	3.07617078211793262743+002	17	3.4360309551558532035+002
18	3.4362240468601283-397+002	18	3.4361738863396308794+002	18	3.81604795059235444887+002
19	3.81622124656765-249+002	19	3.816176594074121923+002	19	4.21606250194780114394+002
20	4.2162175131073797-222+002	20	4.21617895563359178756+002	20	4.63607505703958716166+002
21	4.6362155150503715-332+002	21	4.636170708523113354+002	21	5.0760596589078671440+002
22	5.0762145218143765-58+002	22	5.07615357338800745+002	22	5.5360955035102995477+002
23	5.536213214677855-52+002	23	5.53615381278805779+002	23	6.01610389166451986770+002
24	6.0162122404355030-900+002	24	6.0161515733533800745+002	24	6.5161113078200785375+002
25	6.5162122404355030-900+002	25	6.5161630263159743422+002	25	7.036178870221619811+002
26	7.03621044355030-900+002	26	7.03616733169335206748+002	26	7.576123770447026430+002
27	7.5762147147344320-453+002	27	7.5761582301902751392+002	27	8.13612904700164412063+002
28	8.1362167147344320-453+002	28	8.1361904433906829901+002	28	8.71613378828685842102+002
29	8.7162167147344320-453+002	29	8.7161977675580113258+002	29	9.3161380637397532777+002
30	9.3162167147344320-453+002	30	9.3161904433906829901+002	30	9.93614194799135663119+002
31	9.9362167147344320-453+002	31	9.9361904433906829901+002	31	1.05761454730852233874+003
32	1.0576204521133827479+003	32	1.05761915615794032993+003	32	1.12361486863764331695+003
33	1.1236204521133827479+003	33	1.1236192077851262234+003	33	1.19161516236043692189+003
34	1.1916204521133827479+003	34	1.1916192531464040099+003	34	1.26161543155274403481+003
35	1.2616204521133827479+003	35	1.2616192531464040099+003	35	1.33361567847357922989+003
36	1.3336204521133827479+003	36	1.333619332911908968+003	36	1.407615906630859302+003
37	1.4076204521133827479+003	37	1.407619332911908968+003	37	1.48361611643570543596+003
38	1.4836204521133827479+003	38	1.483619332911908968+003	38	1.56161631124743112538+003
39	1.5616204521133827479+003	39	1.561619435620902243+003	39	1.64161649141005187006+003
40	1.6416204521133827479+003	40	1.641619435620902243+003	40	1.7236166586834750627+003
41	1.7236204521133827479+003	41	1.723619435620902243+003	41	1.80761681426869180944+003
42	1.8076204521133827479+003	42	1.807619435620902243+003	42	1.89361695923052113947+003
43	1.8936204521133827479+003	43	1.893619514981732165+003	43	1.9816170945482261268+003
44	1.9816204521133827479+003	44	1.981619514981732165+003	44	2.0716172208453158594+003
45	2.0716204521133827479+003	45	2.071619514981732165+003	45	2.1636173393327476120+003
46	2.1636204521133827479+003	46	2.163619514981732165+003	46	2.2576174509392615469+003
47	2.2576204521133827479+003	47	2.25761964265403967+003	47	2.3536175544535078645+003
48	2.3536204521133827479+003	48	2.35361964265403967+003	48	2.4516176523567953710+003
49	2.4516204521133827479+003	49	2.45161964265403967+003	49	2.551617744947841892+003
50	2.5516204521133827479+003	50	2.55161964265403967+003	50	2.65361783131151576727+003

IMAGINATE EIGENVALUES M = 2.00

M = 1		M = 2	
EIGENVALUE		EIGENVALUE	
L	EIGENVALUE	L	EIGENVALUE
1	1.127724044849717	2	6.542495274390570
2	4.287125435557561	3	1.329825047378257
3	9.225713011358591	4	2.1605133037471485
4	1.413020377026734	5	3.1747043198920215
5	2.205462577044597	6	4.382346697499226
6	3.203526374692297	7	5.786952703429507
7	4.404274740293191	8	7.389949457224728
8	5.401177764846267	9	9.192013358014158
9	7.401414416534247	10	1.119349716564247
10	9.201136433046771	11	1.339460062977286
11	1.126521355514227	12	1.579544402315705
12	1.343076635446194	13	1.839610340522378
13	1.546647140156554	14	2.119662884257386
14	1.746654734146224	15	2.419705441324868
15	1.94647573016556	16	2.739740398001033
16	2.146215111645224	17	3.079769466448872
17	2.346022618921517	18	3.439793901462228
18	2.545825741719479	19	3.819814639898780
19	2.745635702466887	20	4.219832392836498
20	2.945435931117301	21	4.639847709427107
21	3.14521318663561	22	5.079861012708190
22	3.345021738629284	23	5.539872644394210
23	3.54481514610531	24	6.019882873242172
24	3.74461514610531	25	6.519891577708731
25	3.94441514610531	26	7.039899498889389
26	4.14421514610531	27	7.579907117832707
27	4.34401514610531	28	8.139913542145361
28	4.54381514610531	29	8.719919321657683
29	4.74361514610531	30	9.319924539937105
30	4.94341514610531	31	9.939929267422763
31	5.14321514610531	32	1.057963563834443
32	5.34301514610531	33	1.123997480070608
33	5.54281514610531	34	1.191994105072981
34	5.74261514610531	35	1.261994434032408
35	5.94241514610531	36	1.331994735428830
36	6.14221514610531	37	1.401995012978798
37	6.34201514610531	38	1.471995269128947
38	6.54181514610531	39	1.541995506130473
39	6.74161514610531	40	1.611995725583943
40	6.94141514610531	41	1.681995929387518
41	7.14121514610531	42	1.751996118965747
42	7.34101514610531	43	1.821996295596435
43	7.54081514610531	44	1.891996466432816
44	7.74061514610531	45	1.961996614502472
45	7.94041514610531	46	2.031996758723427
46	8.14021514610531	47	2.101996893917845
47	8.34001514610531	48	2.171997020823905
48	8.53981514610531	49	2.241997140167047
49	8.73961514610531	50	2.311997252367433
50	8.93941514610531	51	2.381997355813456
51	9.13921514610531		

PROLATE EIGENVALUES M = 2.20

M = 1			M = 2		
EIGENVALUE			EIGENVALUE		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
1	1.321778093158398353342+000	2	2.87355914567563482245+000	2	6.64988252541709567093+000
2	4.7380611194996600067+000	3	7.9851491151084376142+000	3	1.35622282315274617860+001
3	8.7166577166633183554+000	4	1.42784274206340082128+001	4	2.19403644467551112014+001
4	1.4556635364375727582+001	5	2.2351171160138003820+001	5	3.1211586808668379464+001
5	2.249385268349559529+001	6	3.2378407766441360128+001	6	4.42076860816157872537+001
6	3.246711566707075975+001	7	4.43915752345335768434+001	7	5.8263433519259449195+001
7	4.44531625497678049207+001	8	5.83922263156407593022+001	8	7.4299581382199121117+001
8	5.8444606386328025301+001	9	7.44041092720063225301+001	9	9.12324412397856292728+001
9	7.4439000475401477471+001	10	9.1240799977530725247+002	10	1.1234223152433350647+002
10	9.1243232540553507183+002	11	1.1240799977530725247+002	11	1.3435546927769748319+002
11	1.1243232540553507183+002	12	1.3441155118915444119+002	12	1.58365569772299173504+002
12	1.3441155118915444119+002	13	1.58412883681261052760+002	13	1.8437346347675380524+002
13	1.58428055462334213207+002	14	1.84413922377371315123+002	14	2.12379749786751793803+002
14	1.8442741131604581664+002	15	2.124147790868995020+002	15	2.42384438765051925447+002
15	2.1242611548817560803+002	16	2.424154455578118736+002	16	2.743890171921118165081+002
16	2.4242506814530909109+002	17	2.7441596261694117502+002	17	3.083924906255433235+002
17	2.74424944452721549583+002	18	3.084164639175478323+002	18	3.4365409585050551666+002
18	3.0842435218316416871+002	19	3.4416797870178173671+002	19	3.823978837263311782+002
19	3.44232768052218840+002	20	3.8241712329217446893+002	20	4.224000617513541987+002
20	3.8242353258678360079+002	21	4.2241739359898497833+002	21	4.6440183457217032411+002
21	4.2242353258678360079+002	22	4.644173651132471971+002	22	5.0840342271624472477+002
22	4.644226066504363058+002	23	5.084178359035401367+002	23	5.54404811010585013535+002
23	5.084226066504363058+002	24	5.54417024538949406696+002	24	6.024060315702649182+002
24	5.54422613774252874+002	25	6.0241183584524401599+002	25	6.5240711087814830279+002
25	6.0242232429054745622+002	26	6.5241324131363751562+002	26	7.0440806916132738258+002
26	6.52422622003621535386+002	27	7.044144845599661871+002	27	7.58408924445361257205+002
27	7.0442190691743743795+002	28	7.5841560295625059004+002	28	8.1440949084741393395+002
28	7.5842172280254367898+002	29	8.1441660052633483234+002	29	8.72410380242654713727+002
29	8.14421649815544015395+002	30	8.724174977445203978+002	30	9.3241102732578356621+002
30	8.72421525627658497707+002	31	9.32418830765131110250+002	31	9.9441156610051866974+002
31	9.32421440127803348563+002	32	9.94419004123310312449+002	32	1.0584120794635242844+003
32	9.94421349976281865675+002	33	1.05841897077990297536+003	33	1.12441254611869547654+003
33	1.05842126803702462322+003	34	1.12441903152794570451+003	34	1.19241297303195741561+003
34	1.1244211250007907347+003	35	1.19241903704642274697+003	35	1.26241336426484403077+003
35	1.1924210624783456245+003	36	1.26241913791841745764+003	36	1.33441372368824338076+003
36	1.2624210624783456245+003	37	1.33441918465161071325+003	37	1.40841405466165605491+003
37	1.3344210049789607525+003	38	1.4084192768070213338+003	38	1.48441436011226663694+003
38	1.40842056305297298194+003	39	1.4844192738874946178+003	39	1.56241464259987584955+003
39	1.48442056305297298194+003	40	1.56241930410468551342+003	40	1.6424149037126004372+003
40	1.56242065794884746038+003	41	1.64241936672046651438+003	41	1.72441514740469703822+003
41	1.64242061603742453943+003	42	1.72441936672046651438+003	42	1.80841537344774717204+003
42	1.72442077716195180918+003	43	1.80841939609754735559+003	43	1.89441558404979118052+003
43	1.80842074098331955550+003	44	1.89441942646020646208+003	44	1.9824157805836768465+003
44	1.89442070727419925233+003	45	1.98441945200555855016+003	45	2.07241596427829567778+003
45	1.98442067581475243122+003	46	2.07441945200555855016+003	46	2.16441613622778510666+003
46	2.07242064640512697676+003	47	2.16441945200555855016+003	47	2.25841629741292090494+003
47	2.16442061888230330630+003	48	2.25841951516041360737+003	48	2.3544164487141015066+003
48	2.25842059307752783065+003	49	2.35441951516041360737+003	49	2.45241659092371205378+003
49	2.3544205668540444671+003	50	2.45241951516041360737+003	50	2.5524167275594703022+003
50	2.452420546008524941376+003	51	2.55241951516041360737+003	51	2.65441685085640051848+003

PROLATE EIGENVALUES M = 2.40

N = 0

EIGENVALUE

L

1.5211724470919297862+000
 5.22016835616594911981+000
 9.25941801050312649049+000
 1.5061282663079492155+001
 2.2077745982091679141+001
 3.20422976429248380852+001
 4.492366767129550212+001
 5.891237160532254901+001
 7.4905921245022270828+001
 9.2899693653614669220+001
 1.12896218561181760314+002
 1.3489247881665604479+002
 1.58891365097974788866+002
 1.84865741672194042710+002
 2.12886432278924949205+002
 2.428973782322613380+002
 2.7488645302553905890+002
 3.088577331146997815+002
 3.44845161728187869713+002
 3.8284464328813108032+002
 4.2284415317456125993+002
 4.648316174478820+002
 5.048324625661158358+002
 5.4882152113451955099+002
 6.0282921039574769750+002
 6.528270615572482469+002
 7.048525643073290147+002
 7.5882328865687337263+002
 8.14882167927814188675+002
 8.728820212525385333+002
 9.32881852369728261754+002
 9.9484177390018391503+002
 1.058816622342276863+003
 1.1248615680664195754+003
 1.1928614783387215109+003
 1.2628613601015064610+003
 1.334861305431494710+003
 1.40886120559307156+003
 1.488811897370202258+003
 1.5628611273378441327+003
 1.64286107229052161938+003
 1.72486107229052161938+003
 1.808860536462714320+003
 1.89486059234564412957+003
 1.98286058600715359266+003
 2.07286054936757804240+003
 2.164860513196879970+003
 2.2588607792896739491+003
 2.3548607474507059874+003
 2.45286071754066220378+003

M = 1

EIGENVALUE

L

5.02127732501551773741+000
 8.34292943650562616335+000
 1.4713081179120104959+001
 2.2804199629236393893+001
 3.28350173407377953866+001
 4.4849663123728094990+001
 5.885799730784758108+001
 7.48632512018993479676+001
 9.28667967180974142403+001
 1.12865312521938991911+002
 1.3487116147465119648+002
 1.5887256563059838981+002
 1.84873657257083687826+002
 2.12874523272523375671+002
 2.428722220110832044+002
 2.7487594651260999019+002
 3.08874269545708045188+002
 3.4487666753025291804+002
 3.8287700552405585089+002
 4.22877294088982767337+002
 4.648775427250995089+002
 5.088775849595390045+002
 5.487794664942016941+002
 6.02878112563167247571+002
 6.5287725885578120142+002
 7.0487388737844013940+002
 7.588750458026714414+002
 8.1487808339963429313+002
 8.728770164373486681+002
 9.3287785853095612385+002
 9.94878862114592158174+002
 1.05887893139934776104+003
 1.12487899453435939351+003
 1.19287905222745362501+003
 1.26287910508734981012+003
 1.334879153898628844+003
 1.40887919834114195302+003
 1.4888792358841486735+003
 1.5628792772895321384+003
 1.6428793120674061223+003
 1.7248793458719494310+003
 1.808879363793844168+003
 1.89487937459947119078+003
 1.9828794313185326332+003
 2.0728794561025535647+003
 2.1648794752997649727+003
 2.25887950104288949214+003
 2.35487952145104745118+003
 2.4528795403140943140+003
 2.5528795586805823908+003

M = 2

EIGENVALUE

L

6.76466007082181009103+000
 1.3848024472356765488+001
 2.3065730474624716943+001
 3.25172971317226596350+001
 4.428944880500133268+001
 5.8653353466788896702+001
 7.47382339127018821843+001
 9.27676085514233286457+001
 1.12788640674913800137+002
 1.34804238823046248067+002
 1.58016131408956209842+002
 1.84825413287287946681+002
 2.1283280350499090881+002
 2.4283878114584624497+002
 2.7484388697506970117+002
 3.088477635359433264081+002
 3.4485118825639493193+002
 3.82854093413353338613+002
 4.228565927556339875+002
 4.64858722990361207571+002
 5.08860984709444279795+002
 5.548622119003806477+002
 6.02863642842707352+002
 6.5286490880512145697+002
 7.04866029843093143505+002
 7.58667031871060735493+002
 8.1486792569488145929+002
 8.72868737205252217287+002
 9.32869466381861061538+002
 9.9487012682256453446+002
 1.05887076983750895+003
 1.1248712739826531933+003
 1.19287177393087587677+003
 1.26287223207599718979+003
 1.3348726295556868717+003
 1.40887304050731254547+003
 1.48887339816188497954+003
 1.5628737286131281391+003
 1.6428740354123086556+003
 1.724874199598015796+003
 1.80887458460691345435+003
 1.89487483117021424702+003
 1.98287506126075830676+003
 2.07287527631466720371+003
 2.16487547761482452427+003
 2.2588756663100950688+003
 2.3548758433179129412+003
 2.45287600990781846200+003
 2.55287616657484160925+003
 2.65487631418903647380+003

PROBATE EIGENVALUES M = 2.60

M = 1			M = 2		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
1	1.72433400465529335535+000	1	3.17631266809085381578+000	2	6.086903765304928556248+000
2	5.7702282922547474115+000	2	6.7702282922547474115+000	3	1.1548049741594103711+001
3	9.8541132527299967278+000	3	1.51850444307088962552+001	4	2.7033951879698013090+001
4	1.5617497500068273335+001	4	2.3295810752461509935+001	5	3.2955140224342475334+001
5	3.5075034265668365217+001	5	1.333291571033298844771+001	6	4.508733705495212919+001
6	3.346102668090373820+001	6	4.5348435255471611011+001	7	5.1654299927302982619+001
7	4.53464145553502445983+001	7	8.93574186496665312406+001	8	7.52155907755109715858+001
8	5.9421941052806711925+001	8	7.5363998102439371447+001	9	9.32498328641429391267+001
9	7.54123684363694051852+001	9	5.33667419778492066430+001	10	1.33274296798265165287+002
10	9.340575103891219521+001	10	1.13365303687314274108+002	11	1.35292406511508094130+002
11	1.1340097118255439645+002	11	1.3537117891129678603+002	12	1.5930620024480645726+002
12	1.339744548402373674+002	12	1.5937259430287440624+002	13	1.85316955604567988441+002
13	1.5394774062912257009+002	13	1.8537769179010039685+002	14	2.13325508072310547061+002
14	1.839266656265922086+002	14	2.13374559532185417017+002	15	2.13332423285551132889+002
15	2.13390933715069550+002	15	2.4337525872122577902+002	16	2.7533809563943458211+002
16	2.433855223210843526+002	16	3.75375830089176137344+002	17	3.03342807135164505658+002
17	2.733846575237594364+002	17	3.0337430350719008821+002	18	3.45346763850750271203+002
18	3.038747001948905751+002	18	3.45374700183195683657+002	19	3.8335011927979348231+002
19	3.453866571183257674+002	19	3.8337703534977906170+002	20	4.2335288069257585978+002
20	3.83386066818237070+002	20	4.2337322687134051770+002	21	4.6335546447620404823+002
21	4.2338543408916205586+002	21	4.6337569571307413180+002	22	5.033576133054074341+002
22	4.6339457364725140004+002	22	5.033778378806717424+002	23	5.453559491124697671318+002
23	5.034057364725140004+002	23	5.4537797058604030408+002	24	5.85336141731054506633+002
24	5.454110581704590772+002	24	6.033741342817302472+002	25	6.253362600475384862203+002
25	6.033873795189965242130+002	25	6.53372796691038263070+002	26	7.053365051740424878937+002
26	6.53392561730464054+002	26	7.05374408299698848719+002	27	7.453366087249727025017+002
27	7.053823245823605301831+002	27	7.45374922585111008318+002	28	8.7336701864343932889+002
28	7.45393013454797215123+002	28	8.1537625575750588395+002	29	9.33367459428531766439+002
29	8.15382045192244403650+002	29	8.73378717591792910653+002	30	9.95368620942224542969+002
30	8.73382617812145943885+002	30	9.33378801288216299388+002	31	1.05936931298245938485+003
31	9.33382617812145943885+002	31	9.953787605323660444+002	32	1.1253699434573236568+003
32	9.95382617812145943885+002	32	1.05937894520846766631+003	33	1.1633705206519877750+003
33	1.059382617812145943885+002	33	1.12537900761919254373+003	34	1.26333104822730335437+003
34	1.125382617812145943885+002	34	1.19337906464039473329+003	35	1.33537153342039908187+003
35	1.193382617812145943885+002	35	1.263379118762679422+003	36	1.40933198017564625470+003
36	1.263382617812145943885+002	36	1.335379118762679422+003	37	1.485337232518458084+003
37	1.335382617812145943885+002	37	1.335379118762679422+003	38	1.56337277371054402919+003
38	1.40933198017564625470+003	38	1.4093792050095372758+003	39	1.64337312698929347830+003
39	1.485337232518458084+003	39	1.48537924575320134585+003	40	1.72537145496234830588+003
40	1.56337277371054402919+003	40	1.56337924575320134585+003	41	1.809337599917786148+003
41	1.64337312698929347830+003	41	1.64337924575320134585+003	42	1.895337404417016952935+003
42	1.72537145496234830588+003	42	1.72537935471643467971+003	43	1.98337430935671149725+003
43	1.809337599917786148+003	43	1.80937938483882668314+003	44	2.0733745870777858710+003
44	1.895337404417016952935+003	44	1.89537938483882668314+003	45	2.16537478920293620977+003
45	1.98337430935671149725+003	45	1.98337938483882668314+003	46	2.25937500666710959016+003
46	2.0733745870777858710+003	46	2.0733794635432646555+003	47	2.3553752107895979085+003
47	2.16537478920293620977+003	47	2.1653794635432646555+003	48	2.4533755831843628470+003
48	2.25937500666710959016+003	48	2.25937950790121765650+003	49	2.553375752329321890968+003
49	2.3553752107895979085+003	49	2.3553795204298531016+003	50	
50	2.4533755831843628470+003	50	2.45337954697182899558+003		
51	2.553375752329321890968+003	51	2.55337954697182899558+003		

PROLATE EIGENVALUES M = 2.80

M = 1			M = 2		
EIGENVALUE			EIGENVALUE		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
1	1.92986459473793193405+000	1	2.33774033716629996453+000	2	7.01588761738785230086+000
2	6.2640341170265374820+000	2	5.12990701286630174044+000	3	1.44816924742935022756+001
3	1.04991862769378547486+001	3	1.5603749939669877523+001	4	2.313040140730519868+001
4	1.6226244177232883859+001	4	2.38322717610017259+001	5	3.3428133749097122430+001
5	2.4081450628938479351+001	5	2.3872458833693285263+001	6	4.5583027384401110307+001
6	3.402376573768667943+001	6	4.58895861512668313303+001	7	5.96737799858085737686+001
7	4.59922945420414400393+001	7	5.98984020619379704683+001	8	7.5717680120134223923+001
8	5.9975927431384225193+001	8	7.5903492548132212074+001	9	9.3771204793234862271+001
9	7.59612461348002264896+001	9	9.3907420084334031957+001	10	1.1379930554124523906+002
10	9.39528961482883105795+001	10	1.13909008543611935300+002	11	1.358200057223431920425+002
11	1.139468107171280932+002	11	1.35911711416152312+002	12	1.508358773302878293+002
12	1.35942278471102333625+002	12	1.5091106345731253341+002	13	1.85848156146125734637+002
13	1.59988105223374684+002	13	1.5991405586636950533+002	14	2.13857926994093000342+002
14	2.139468107171280932+002	14	2.13914922660952967066+002	15	2.4386581670103540087+002
15	2.139468107171280932+002	15	2.4391558551722835889+002	16	2.7587273680157686839+002
16	2.439468107171280932+002	16	2.4391558551722835889+002	17	3.09877666790498795350+002
17	2.759468107171280932+002	17	2.7591122711049298351+002	18	3.4588217731730943056+002
18	3.099468107171280932+002	18	3.0991456665940231813+002	19	3.8388601098894314441+002
19	3.459468107171280932+002	19	3.4591122711049298351+002	20	4.23889271216133603526+002
20	3.839468107171280932+002	20	3.8391122711049298351+002	21	4.65892089920261244714+002
21	4.239468107171280932+002	21	4.2391122711049298351+002	22	5.09894516842698285217+002
22	4.659468107171280932+002	22	4.6591122711049298351+002	23	5.5589664756151367364+002
23	5.099468107171280932+002	23	5.0991122711049298351+002	24	6.0389853796198102210+002
24	5.559468107171280932+002	24	5.5591122711049298351+002	25	6.53900213966165949224+002
25	6.039468107171280932+002	25	6.0391122711049298351+002	26	7.0901688249229155071+002
26	6.539468107171280932+002	26	6.5391122711049298351+002	27	7.5903003041200623381+002
27	7.090468107171280932+002	27	7.0901122711049298351+002	28	8.15904131601176245724+002
28	7.590468107171280932+002	28	7.5901122711049298351+002	29	8.73905241190354401951+002
29	8.159468107171280932+002	29	8.1591122711049298351+002	30	9.339061376183444203+002
30	8.739468107171280932+002	30	8.7391122711049298351+002	31	9.95907063873014977005+002
31	9.339468107171280932+002	31	9.3391122711049298351+002	32	1.05990785095045045175+003
32	9.959468107171280932+002	32	9.9591122711049298351+002	33	1.1259085682491772324+003
33	1.0599468107171280932+003	33	1.0599468107171280932+003	34	1.1939092237617122054+003
34	1.1259468107171280932+003	34	1.1259468107171280932+003	35	1.263909824415644047+003
35	1.1939468107171280932+003	35	1.1939468107171280932+003	36	1.3359103761581097071+003
36	1.2639468107171280932+003	36	1.2639468107171280932+003	37	1.409108841684118855+003
37	1.3359468107171280932+003	37	1.3359468107171280932+003	38	1.48591135295354951262+003
38	1.4091468107171280932+003	38	1.4091468107171280932+003	39	1.5639117864570760861+003
39	1.4859468107171280932+003	39	1.4859468107171280932+003	40	1.6439120812418273483+003
40	1.5639468107171280932+003	40	1.5639468107171280932+003	41	1.725912561016470297+003
41	1.6439468107171280932+003	41	1.6439468107171280932+003	42	1.80991290780714154894+003
42	1.7259468107171280932+003	42	1.7259468107171280932+003	43	1.895913320849377755+003
43	1.8099468107171280932+003	43	1.8099468107171280932+003	44	1.98391353236344671069+003
44	1.8959468107171280932+003	44	1.8959468107171280932+003	45	2.0739136141234351641+003
45	1.9839468107171280932+003	45	1.9839468107171280932+003	46	2.16591407785081168854+003
46	2.0739468107171280932+003	46	2.0739468107171280932+003	47	2.2599143250638555677+003
47	2.1659468107171280932+003	47	2.1659468107171280932+003	48	2.3559145571057041459+003
48	2.2599468107171280932+003	48	2.2599468107171280932+003	49	2.45391477518928339573+003
49	2.3559468107171280932+003	49	2.3559468107171280932+003	50	2.55391498041629623974+003
50	2.4539468107171280932+003	50	2.4539468107171280932+003	51	2.65591517377841554222+003

PROBATE EIGENVALUES M = 3.00

M = 1			M = 2		
EIGENVALUE			EIGENVALUE		
L	P	EIGENVALUE	L	P	EIGENVALUE
1	1	2.1367222261613133907+000	2	2	7.15110052408166207194+000
2	2	6.8208222866371818740+000	3	3	1.48277782137455425811+001
3	3	1.19293648952678449+001	4	4	2.358709233318328495909+001
4	4	1.6886302226155178485+001	5	5	3.39361510702074332634+001
5	5	2.47082346301667324987+001	6	6	4.61160593532920145030+001
6	6	3.46312807985315417836+001	7	7	6.0220506638754453132+001
7	7	4.659127496861765569+001	8	8	7.6286910635645+836156+001
8	8	6.0567635669929951267+001	9	9	9.433185162947320903+001
9	9	7.6552155694470+855542+001	10	10	1.136378036943433329+002
10	10	9.4544961477072749191+001	11	11	1.3638731865759933725+002
11	11	1.14538102376280361+002	12	12	1.604511629699098497+002
12	12	1.36528051953296603942+002	13	13	1.86419044397940312078+002
13	13	1.6052716861594294993+002	14	14	2.14430128771140198865+002
14	14	1.86512933536897137+002	15	15	2.44339037248030909290+002
15	15	2.1451561255693163572+002	16	16	2.7646613556628215305+002
16	16	2.445135076739315183+002	17	17	3.10452391471798734131+002
17	17	2.765125244101902175+002	18	18	3.46461778953903205584+002
18	18	3.105120197618660945+002	19	19	3.84461778953903205584+002
19	19	3.46510747675665867279+002	20	20	4.24465460350794451678+002
20	20	3.845066770710295656+002	21	21	4.6446863267667828039+002
21	21	4.2456742952957890284+002	22	22	5.1047138591555555304+002
22	22	4.6657944991643219185+002	23	23	5.5647379096077762144+002
23	23	5.10507251630011703870+002	24	24	6.04475904249042235540+002
24	24	5.565066453232122039+002	25	25	6.544777134853039408+002
25	25	6.04566112053494913821+002	26	26	7.0647942905075865384+002
26	26	6.545664619798461234+002	27	27	7.6448007626957455452+002
27	27	7.06552217417534337+002	28	28	8.1648223034606193144+002
28	28	7.605484784012133233+002	29	29	8.7448342302257729509+002
29	29	8.16504512760547770809+002	30	30	9.3448449795624332193+002
30	30	8.74504211244036833592+002	31	31	9.96485471463315175277+002
31	31	9.345193196000102193+002	32	32	1.06048635593168246708+003
32	32	9.965026520295424343+002	33	33	1.12648716191768093274+003
33	33	1.060534482545967664+003	34	34	1.19448789843754831731+003
34	34	1.126632639114131237+003	35	35	1.26448857377335433930+003
35	35	1.19448789843754831731+003	36	36	1.33648919312979418280+003
36	36	1.264502592376743603+003	37	37	1.41048976382752376534+003
37	37	1.33650274863428351078+003	38	38	1.48649029043500739555+003
38	38	1.410526037839848666+003	39	39	1.56449077738703433071+003
39	39	1.4865024700943742918+003	40	40	1.64449122856686647126+003
40	40	1.56450247464471412039+003	41	41	1.72649164740358137661+003
41	41	1.644502318606728326+003	42	42	1.8044923691414208640+003
42	42	1.72650212547064049695+003	43	43	1.884492383721420157+003
43	43	1.804502651301495382+003	44	44	2.07449305481655142077+003
44	44	1.884502651301495382+003	45	45	2.1644933510075842559+003
45	45	1.9845018462636702664+003	46	46	2.2604933284250362386+003
46	46	2.07450176383474140445+003	47	47	2.35649388920399142005+003
47	47	2.16450162525453990952+003	48	48	2.45449413410756505428+003
48	48	2.2605016219664345508+003	49	49	2.55449436456907413787+003
49	49	2.35650155271304992006+003	50	50	2.656494958170281227963+003
50	50	2.45450144343692386484+003			

PROLATE EIGENVALUES M = 3.20

M = 0			M = 1			M = 2		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	2.34418683814875518548*000	1	3.67664328644100383355*000	2	7.292042074445992417663*000	2	7.292042074445992417663*000	2
1	7.9469181591245516736*000	2	1.0001696820942442424*001	3	1.51921258182103746522*001	3	1.51921258182103746522*001	3
2	1.1933546143536157958*001	3	1.68182953078675090945*001	4	2.40729020471797697041*001	4	2.40729020471797697041*001	4
3	1.76071886565656143562*001	4	2.50260004336666636533*001	5	3.44790952286187443733*001	5	3.44790952286187443733*001	5
4	2.53821968513014232138*001	5	3.50780353409642162522*001	6	4.6685383224540453876*001	6	4.6685383224540453876*001	6
5	3.52842520834304081549*001	6	4.70960060461719994561*001	7	6.08058847744832511294*001	7	6.08058847744832511294*001	7
6	4.7234171271288049151*001	7	6.11043305093156296763*001	8	7.68811659532406754872*001	8	7.68811659532406754872*001	8
7	6.12043973150294450089*001	8	7.71089030840405591377*001	9	9.49319108679684431866*001	9	9.49319108679684431866*001	9
8	7.7850614793731147207*001	9	9.1511169626912392707*001	10	1.14967842413495689545*002	10	1.14967842413495689545*002	10
9	9.5171741783669483820*001	10	1.1511353343541868155*002	11	1.36994267656713845542*002	11	1.36994267656713845542*002	11
10	1.15162158014150406148*002	11	1.37114809787853342323*002	12	1.6101429594219977204*002	12	1.6101429594219977204*002	12
11	1.37155024450691928092*002	12	1.6111373470927812703*002	13	1.87029853183762244622*002	13	1.87029853183762244622*002	13
12	1.611495676868276447*002	13	1.87115427752812208875*002	14	2.15042188880130935515*002	14	2.15042188880130935515*002	14
13	1.871495676868276447*002	14	2.15115961332802857953*002	15	2.45052135415898748081*002	15	2.45052135415898748081*002	15
14	2.15149403411019775*002	15	2.45117381461458829292*002	16	2.77000278880493137425*002	16	2.77000278880493137425*002	16
15	2.4513913531993771623*002	16	2.771177855555930387*002	17	3.1067033745459879088*002	17	3.1067033745459879088*002	17
16	2.77136868318527712858*002	17	3.1117993402745310050*002	18	3.47072697947939593117*002	18	3.47072697947939593117*002	18
17	3.111349824160274262*002	18	3.4711822061837377315*002	19	3.85077495881279459149*002	19	3.85077495881279459149*002	19
18	3.4713339651101195269*002	19	3.8511841072321735253*002	20	4.25081596278143332786*002	20	4.25081596278143332786*002	20
19	3.85132050262739431398*002	20	4.25119571494028629729*002	21	4.67085128561509629759*002	21	4.67085128561509629759*002	21
20	4.25130897498852188364*002	21	4.67118708714101672408*002	22	5.11088193376985534336*002	22	5.11088193376985534336*002	22
21	4.671299027574517159*002	22	5.111188268190814000*002	23	5.5708089965100477856*002	23	5.5708089965100477856*002	23
22	5.11129038498831152254*002	23	5.57119929243916069109*002	24	6.0509322141508749427*002	24	6.0509322141508749427*002	24
23	5.5712828272514836260*002	24	6.051190865918087903*002	25	6.55095298469835039395*002	25	6.55095298469835039395*002	25
24	6.051276180439108417*002	25	6.551159728285337013*002	26	7.07097142322600864371*002	26	7.07097142322600864371*002	26
25	6.551270303136027507*002	26	7.07111666908871298*002	27	7.61098786699730403826*002	27	7.61098786699730403826*002	27
26	7.0712650821348994923*002	27	7.611128221278616974*002	28	8.17100259431242047665*002	28	8.17100259431242047665*002	28
27	7.61126042217984169244*002	28	8.17119283184625617945*002	29	8.75101583648290611075*002	29	8.75101583648290611075*002	29
28	8.17125624561540563020*002	29	8.75113332429667488934*002	30	9.35102778705737260613*002	30	9.35102778705737260613*002	30
29	8.7512524874221236618*002	30	9.35119376728653461623*002	31	1.06110484403099195603*003	31	1.06110484403099195603*003	31
30	9.3512493941639797139*002	31	9.35119416726954337713*002	32	1.12710573985018259623*003	32	1.12710573985018259623*003	32
31	9.712462071352845287*002	32	1.06111945236740424568*003	33	1.19310655841349997594*003	33	1.19310655841349997594*003	33
32	1.06112432269709595429*003	33	1.12711948590934099890*003	34	1.26510730836795720872*003	34	1.26510730836795720872*003	34
33	1.1271240677636211983*003	34	1.19311951594362020228*003	35	1.33710799718218678953*003	35	1.33710799718218678953*003	35
34	1.1931233851599200302*003	35	1.2651195434046037852*003	36	1.41110863133430232348*003	36	1.41110863133430232348*003	36
35	1.265123621835077072*003	36	1.33711956857967711288*003	37	1.48710921646555263874*003	37	1.48710921646555263874*003	37
36	1.3371234254350875147*003	37	1.4111959171699111486*003	38	1.56510975750700564125*003	38	1.56510975750700564125*003	38
37	1.411123245018960601*003	38	1.48711961303179617453*003	39	1.64511025878426939560*003	39	1.64511025878426939560*003	39
38	1.4871237827431382425*003	39	1.56511963271150820293*003	40	1.72711072410465699478*003	40	1.72711072410465699478*003	40
39	1.5651229246487100553*003	40	1.64511965091995838243*003	41	1.8971115683003399659*003	41	1.8971115683003399659*003	41
40	1.6451227614691360837*003	41	1.727122649429302031*003	42	1.98511193607338373708*003	42	1.98511193607338373708*003	42
41	1.727122649429302031*003	42	1.8971196834807919295*003	43	2.07511228759207958342*003	43	2.07511228759207958342*003	43
42	1.8971225253897367678*003	43	1.89711969807145153192*003	44	2.26111292497485057398*003	44	2.26111292497485057398*003	44
43	1.985122410923748925*003	44	1.98511971167185465100*003	45	2.3571132441319037180*003	45	2.3571132441319037180*003	45
44	1.98512233346595604*003	45	2.07511973644156261158*003	46	2.45511374240760058246*003	46	2.45511374240760058246*003	46
45	2.07512233346595604*003	46	2.16711973644156261158*003	47	2.65711139835733047449*003	47	2.65711139835733047449*003	47
46	2.16712233346595604*003	47	2.16711973644156261158*003	48	2.857112161659800413677*003	48	2.857112161659800413677*003	48
47	2.16712233346595604*003	48	2.16711973644156261158*003	49	3.057112161659800413677*003	49	3.057112161659800413677*003	49
48	2.16712233346595604*003	49	2.16711973644156261158*003	50	3.257112161659800413677*003	50	3.257112161659800413677*003	50
49	2.16712233346595604*003	50	2.16711973644156261158*003	51	3.457112161659800413677*003	51	3.457112161659800413677*003	51
50	2.16712233346595604*003							

PRBLATE EIGENVALUES M = 3.40

M = 0			M = 1			M = 2			
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	
0		1	3.852619301011133567102+000	2	7.43823234840080215958+000	3	1.55737813881375039423+001	4	2.5871878882236140318+001
1	2.55171446879376486341+000	2	1.046539334718563302187+001	3	1.046539334718563302187+001	4	1.55737813881375039423+001	5	3.50568128940655287404+001
2	7.98304982174359600974+000	3	1.7432175884742057743+001	4	2.5685275548799186284+001	5	2.5685275548799186284+001	6	4.72945422478377942707+001
3	1.8381790533150054891+001	4	3.57448231476236078323+001	5	4.77627633673123989375+001	6	6.14299284022672506813+001	7	6.14299284022672506813+001
4	2.610638001964332842+001	5	4.77627633673123989375+001	6	6.17700735765722975887+001	7	7.75146880909569254546+001	8	7.75146880909569254546+001
5	3.59834479779074244014+001	6	6.17700735765722975887+001	7	7.7773708766366793938+001	8	9.557152454660363304087+001	9	9.557152454660363304087+001
6	4.7921118476746978562+001	7	7.7773708766366793938+001	8	9.57756644510164782933+001	9	1.15611620300311190990+002	10	1.15611620300311190990+002
7	6.1804233553915393902+001	8	9.57756644510164782933+001	9	1.1577686638305132970+002	10	1.37641027903566395186+002	11	1.37641027903566395186+002
8	7.7865321911148661041+001	9	1.1577686638305132970+002	10	1.3777638908082147980+002	11	1.63663270885112844831+002	12	1.63663270885112844831+002
9	9.58438639446874430914+001	10	1.3777638908082147980+002	11	1.61778161170088037504+002	12	1.8778529007655393346+002	13	1.8778529007655393346+002
10	1.1503202759255769449+002	11	1.61778161170088037504+002	12	1.8778529007655393346+002	13	2.15694179752638316963+002	14	2.15694179752638316963+002
11	1.37823219821421439927+002	12	1.8778529007655393346+002	13	2.15694179752638316963+002	14	2.43705186007282955696+002	15	2.43705186007282955696+002
12	1.6161648374699744443+002	13	2.15694179752638316963+002	14	2.43705186007282955696+002	15	2.77714189006154327104+002	16	2.77714189006154327104+002
13	1.8781121427408830776+002	14	2.43705186007282955696+002	15	2.77714189006154327104+002	16	3.1172164976797790060+002	17	3.1172164976797790060+002
14	2.15067012846190288109+002	15	2.77714189006154327104+002	16	3.1172164976797790060+002	17	3.47727903280198664810+002	18	3.47727903280198664810+002
15	2.45803609546010490765+002	16	3.1172164976797790060+002	17	3.47727903280198664810+002	18	3.8573319786741183688+002	19	3.8573319786741183688+002
16	2.7780081107020957212+002	17	3.47727903280198664810+002	18	3.8573319786741183688+002	19	4.25737720873004011427+002	20	4.25737720873004011427+002
17	3.1179848402427488392+002	18	3.8573319786741183688+002	19	4.25737720873004011427+002	20	4.67741615850912467727+002	21	4.67741615850912467727+002
18	3.4779652731504943871+002	19	4.25737720873004011427+002	20	4.67741615850912467727+002	21	5.11744994339405898431+002	22	5.11744994339405898431+002
19	3.8573319786741183688+002	20	4.67741615850912467727+002	21	5.11744994339405898431+002	22	5.57747944089436192059+002	23	5.57747944089436192059+002
20	4.25737720873004011427+002	21	4.67741615850912467727+002	22	5.11744994339405898431+002	23	6.05750534920460174666+002	24	6.05750534920460174666+002
21	4.6779221667683568705+002	22	5.11744994339405898431+002	23	5.57747944089436192059+002	24	6.5752822956483148443+002	25	6.5752822956483148443+002
22	5.117911503602356593+002	23	5.57747944089436192059+002	24	6.05750534920460174666+002	25	7.07754853736068289634+002	26	7.07754853736068289634+002
23	5.57790217901455421249+002	24	6.05750534920460174666+002	25	6.5752822956483148443+002	26	7.6175664526612518621+002	27	7.6175664526612518621+002
24	6.0578939784401560773+002	25	6.5752822956483148443+002	26	7.07754853736068289634+002	27	8.1775826067837346758+002	28	8.1775826067837346758+002
25	6.5578667284621537460+002	26	7.07754853736068289634+002	27	7.6175664526612518621+002	28	8.75759743900214073994+002	29	8.75759743900214073994+002
26	7.07788028675030384074+002	27	7.6175664526612518621+002	28	8.1775826067837346758+002	29	9.35761059367742769634+002	30	9.35761059367742769634+002
27	7.61787453760507904203+002	28	8.1775826067837346758+002	29	8.75759743900214073994+002	30	9.97762250513035361756+002	31	9.97762250513035361756+002
28	8.1778693855913050073+002	29	8.75759743900214073994+002	30	9.35761059367742769634+002	31	1.0617633250094393407+003	32	1.0617633250094393407+003
29	8.7578647497601707020+002	30	9.35761059367742769634+002	31	9.97762250513035361756+002	32	1.12776431831179193915+003	33	1.12776431831179193915+003
30	9.3578605634269547626+002	31	9.97762250513035361756+002	32	1.0617633250094393407+003	33	1.19576521903451077153+003	34	1.19576521903451077153+003
31	9.9778567716901156344+002	32	1.0617633250094393407+003	33	1.12776431831179193915+003	34	1.2657660442027489326+003	35	1.2657660442027489326+003
32	1.0617853324250374261+003	33	1.12776431831179193915+003	34	1.19576521903451077153+003	35	1.33776680204764152176+003	36	1.33776680204764152176+003
33	1.1278531822806641248+003	34	1.19576521903451077153+003	35	1.2657660442027489326+003	36	1.41176749971010970238+003	37	1.41176749971010970238+003
34	1.1957847311002264235+003	35	1.2657660442027489326+003	36	1.33776680204764152176+003	37	1.48776814340598877884+003	38	1.48776814340598877884+003
35	1.2657844478901131173+003	36	1.33776680204764152176+003	37	1.41176749971010970238+003	38	1.56576873856820953406+003	39	1.56576873856820953406+003
36	1.3377842254265583903+003	37	1.41176749971010970238+003	38	1.48776814340598877884+003	39	1.64576928996201315925+003	40	1.64576928996201315925+003
37	1.4117840032298243220+003	38	1.48776814340598877884+003	39	1.56576873856820953406+003	40	1.72776980178115513728+003	41	1.72776980178115513728+003
38	1.4877837777299991444+003	39	1.56576873856820953406+003	40	1.64576928996201315925+003	41	1.81177027772835664655+003	42	1.81177027772835664655+003
39	1.565783607630315922+003	40	1.64576928996201315925+003	41	1.72776980178115513728+003	42	1.89777072108269823405+003	43	1.89777072108269823405+003
40	1.645783431826617597+003	41	1.72776980178115513728+003	42	1.81177027772835664655+003	43	1.98577113475662312789+003	44	1.98577113475662312789+003
41	1.645783431826617597+003	42	1.81177027772835664655+003	43	1.89777072108269823405+003	44	2.07577152134405956820+003	45	2.07577152134405956820+003
42	1.7277832670595957074+003	43	1.81177027772835664655+003	44	1.98577113475662312789+003	45	2.16777108316137032396+003	46	2.16777108316137032396+003
43	1.811783155564995550+003	44	1.98577113475662312789+003	45	2.07577152134405956820+003	46	2.2617722222222227927403+003	47	2.2617722222222227927403+003
44	1.9857828419905609720+003	45	2.07577152134405956820+003	46	2.16777108316137032396+003	47	2.3577725405676837368+003	48	2.3577725405676837368+003
45	2.075782717376039791+003	46	2.16777108316137032396+003	47	2.2617722222222227927403+003	48	2.45577283969176248547+003	49	2.45577283969176248547+003
46	2.167782602799291515+003	47	2.2617722222222227927403+003	48	2.3577725405676837368+003	49	2.5557731216326410822+003	50	2.5557731216326410822+003
47	2.261782493676615476+003	48	2.3577725405676837368+003	49	2.45577283969176248547+003	50	2.65777338634548938322+003	51	2.65777338634548938322+003
48	2.357782391325145826+003	49	2.45577283969176248547+003	50	2.5557731216326410822+003				
49	2.455782296570215157+003	50	2.5557731216326410822+003						

PRGLATE EIGENVALUES $M = 3.60$

$M = L$			$M = 1$			$M = 2$		
L	EIGENVALUE		L	EIGENVALUE		L	EIGENVALUE	
0	2.758984074	3055662900+000	1	4.03211405056209185937+000		2	7.5892148927865919840+000	
1	6.582864801	1527116393+000	2	1.09454939756244331128+001		3	1.59717812551579809992+001	
2	1.354430877	156188911C+001	3	1.8078812908567337616+001		4	2.51292416950700967548+001	
3	1.921354129	42133315163+001	4	2.63862316137595084266+001		5	3.5669098501268325093+001	
4	2.688252833	208-071014+001	5	3.64547843740327680517+001		6	4.79401333561332921310+001	
5	3.672970458	477066540V+001	6	4.84723331475967110713+001		7	6.2028283075689146563+001	
6	4.865280056	5877609526+001	7	6.2478081538955261700+001		8	7.81876372267795128024+001	
7	6.260752416	3805432705+001	8	7.84802663227929642731+001		9	9.62508442192828028731+001	
8	7.857829968	5461829723+001	9	9.64811268052082536924+001		10	1.1629524996868224600+002	
9	9.65580461	799011041+001	10	1.16481359210659177451+002		11	1.38327719865593986184+002	
10	1.165436037	3637466954+002	11	1.384815114373728264+002		12	1.62352222801523517999+002	
11	1.385326314	8897508144+002	12	1.62481476830809410333+002		13	1.88371191940485518549+002	
12	1.625245944	0-0647472+002	13	1.88481396536964496666+002		14	2.16386190752698900750+002	
13	1.885181515	7025628286+002	14	2.16481299549576547919+002		15	2.46398263276603150235+002	
14	2.165130153	5611415894+002	15	2.1648139975879863816+002		16	2.78408129421896327041+002	
15	2.465088537	680270821+002	16	2.78481103685891785681+002		17	3.12416299279131704816+002	
16	2.785054341	91004044+002	17	3.12481014170999641724+002		18	3.48423142810769261264+002	
17	3.125025897	5781872317+002	18	3.48480932199108236654+002		19	3.86428933845148499643+002	
18	3.465001981	63050309093+002	19	3.8648057829812120125+002		20	4.26433978696575157619+002	
19	3.864981678	4880066884+002	20	4.26480790679569185598+002		21	4.68438135279257296399+002	
20	4.264964295	15515628927+002	21	5.12480730173897454737+002		22	5.1244182617127205927+002	
21	4.684929596	81296923+002	22	5.12480675678652050455+002		23	5.58445047728433353796+002	
22	5.12493263	6775019234+002	23	5.584802656764606822+002		24	6.0644787561287298957+002	
23	5.584924868	3930096163+002	24	6.0648058250265673670+002		25	6.56450374213264103095+002	
24	6.064914846	5421774866+002	25	6.56480542193655014077+002		26	7.0845259059235997295+002	
25	6.564905985	5021858627+002	26	7.08480505917389595069+002		27	7.6245456652084043759+002	
26	7.084896113	4065222767+002	27	7.62480472996313255998+002		28	8.1845633565339189401+002	
27	7.624891087	3960802300+002	28	8.1848043055683881319+002		29	8.76457925952137779977+002	
28	8.184884790	7925350710+002	29	8.76480415766248451541+002		30	9.36459360782229897065+002	
29	8.764879125	5205938523+002	30	9.3648039083141172989+002		31	9.98460658014739297858+002	
30	9.364874009	2320236265+002	31	9.9848036802100876173+002		32	1.0624618396966815321+003	
31	9.984869375	33478142469+002	32	1.06248034708949203856+003		33	1.1284629145952529205+003	
32	1.062486516	1179371923+003	33	1.1284803278492969928+003		34	1.19646389662907535422+003	
33	1.128486132	4433154034+003	34	1.19648031012858435146+003		35	1.26846479621424019095+003	
34	1.196485781	35875516809+003	35	1.26848029377592677248+003		36	1.33846562234395758705+003	
35	1.268485459	683920906+003	36	1.3384802786576272408+003		37	1.41246638281593868120+003	
36	1.338485164	1408103206+003	37	1.4124802645540792236+003		38	1.48846708441843594397+003	
37	1.412484891	97370279289+003	38	1.48848025166441649813+003		39	1.56646773308331452256+003	
38	1.488484640	7792302352+003	39	1.56648023959150777606+003		40	1.64646833401267679465+003	
39	1.566484408	5266669151+003	40	1.6464802786576272408+003		41	1.72846889178414266319+003	
40	1.646484193	15830247657+003	41	1.7284802786576272408+003		42	1.81246941043880544750+003	
41	1.728483993	326243664208+003	42	1.812480293775926772408+003		43	1.8984698355505018994+003	
42	1.812483807	33270025697+003	43	1.89848019895008233125+003		44	1.98467034431077584879+003	
43	1.898483630	974357206+003	44	1.9848019038711236295+003		45	2.07647076553605965770+003	
44	1.986483472	2625951246+003	45	2.07648018235900676431+003		46	2.16547115975790711661+003	
45	2.076483321	1197334723+003	46	2.16848017482268652005+003		47	2.26247152923841968623+003	
46	2.168483179	985479253212+003	47	2.26248016773926263137+003		48	2.35847187600746476337+003	
47	2.262483042	24879174652+003	48	2.3584801610735642931+003		49	2.45647220189073564287+003	
48	2.358482922	7042205447+003	49	2.45648015479372845761+003		50	2.55647250853393075570+003	
49	2.456482805	6860675211+003	50	2.55648014887083569603+003		51	2.6584727747232355419979+003	

PROLATE EIGENVALUES M = 3.80

M = 1

L	EIGENVALUE	L	EIGENVALUE
0	2.96580102291963611003+000	1	4.21459305743263925259+000
1	1.913201387064344867+000	2	1.1440383201424234980+001
2	1.44081612879854095605+001	3	1.67570817812146406451+001
3	2.01026903765822142339+001	4	2.71285255981590926254+001
4	2.7712163981151446266+001	5	3.72083780098624283061+001
5	3.75239355308430355093+001	6	4.92250794865280626118+001
6	4.9429788958669994942+001	7	6.32286847809374992333+001
7	6.337467441925747844+001	8	7.92289580630470056983+001
8	7.93390919830304117194+001	9	9.172283033067710814707+001
9	9.7314636389203103908+001	10	1.17227434455384585430+002
10	1.17297083118288126751+002	11	1.39226580918243026547+002
11	1.63224036684300490939+002	12	1.63225812469905817703+002
12	1.89226227547356198609+002	13	1.69225142979506491633+002
13	2.1726000269201504252+002	14	2.1722566943954009950+002
14	2.4725495386715704914+002	15	2.79223649180779862385+002
15	2.79250815601567090831+002	16	3.1322284350867622487+002
16	3.13247368929918899481+002	17	3.49222699018417547910+002
17	3.49244470989310624758+002	18	4.2722245358929768337+002
18	3.8724201095840133206+002	19	4.69174730037146749970+002
19	4.69238087374200773065+002	20	5.1378728496304752222+002
20	5.13236508385161104968+002	21	5.59182217354219417776+002
21	5.9235127749710226770+002	22	6.07185280012513606233+002
22	6.07233913543793887506+002	23	6.57167983422663624832+002
23	6.5723284002414780633+002	24	7.09190381843811087909+002
24	7.6323168624400755188+002	25	7.63192519633060478218+002
25	7.63231035020059870299+002	26	8.19194433343539774684+002
26	8.1923072145136243925+002	27	8.77196153320237959397+002
27	8.7722958579272634775+002	28	9.37197704926777010668+002
28	9.37228966053145278528+002	29	9.99199109497752037765+002
29	1.0632278942602728229+003	30	1.06320038508476985762+003
30	1.12922742908432542656+003	31	1.12920154704562578263+003
31	1.2672266141640030574+003	32	1.19720260851458988201+003
32	1.3392262561189482249+003	33	1.26720358077682575175+003
33	1.4892256220735898764+003	34	1.33920447357440243904+003
34	1.5672253406322386852+003	35	1.41320529535241687959+003
35	1.6472206671690332931+003	36	1.48920605346129511087+003
36	1.729224837625532837+003	37	1.56720675432302192817+003
37	1.81322461258070223166+003	38	1.64720740356863571536+003
38	1.89922440251201780727+003	39	1.72920800615233744521+003
39	1.98722420665313437152+003	40	1.81320805644722123955+003
40	2.07722402358384758685+003	41	1.89920908832504522623+003
41	2.16922485221400575090+003	42	1.9872057522385786296+003
42	2.26322369156721858423+003	43	2.0772100302050656841+003
43	2.3592235407689805134+003	44	2.16921045600194550813+003
44	2.457223399024026259173+003	45	2.26321085506100019881+003
45		46	2.35921122957736754133+003
46		47	2.45721158152521532780+003
47		48	2.5572119126839328335+003
48		49	2.65921222466076917672+003
49		50	
50		51	

M = 2

L	EIGENVALUE	L	EIGENVALUE
2	7.74455847496324956814+000	2	7.74455847496324956814+000
3	1.63851600479007969931+001	3	1.63851600479007969931+001
4	2.56982875072240409565+001	4	2.56982875072240409565+001
5	3.63156907279332034127+001	5	3.63156907279332034127+001
6	4.86233540449723666095+001	6	4.86233540449723666095+001
7	6.27947299591027082503+001	7	6.27947299591027082503+001
8	7.89001787355993436274+001	8	7.89001787355993436274+001
9	9.6970027890191206643+001	9	9.6970027890191206643+001
10	1.17018874467826492873+002	10	1.17018874467826492873+002
11	1.39054470684473873270+002	11	1.39054470684473873270+002
12	1.63081264120388382244+002	12	1.63081264120388382244+002
13	1.89101955377993628013+002	13	1.89101955377993628013+002
14	2.17118308152920675906+002	14	2.17118308152920675906+002
15	2.47131445883858759034+002	15	2.47131445883858759034+002
16	2.79142171538940932023+002	16	2.79142171538940932023+002
17	3.13151045594790651701+002	17	3.13151045594790651701+002
18	3.49158473729009726919+002	18	3.49158473729009726919+002
19	3.87164755690161006525+002	19	3.87164755690161006525+002
20	4.27170116993966337725+002	20	4.27170116993966337725+002
21	4.69174730037146749970+002	21	4.69174730037146749970+002
22	5.1378728496304752222+002	22	5.1378728496304752222+002
23	5.59182217354219417776+002	23	5.59182217354219417776+002
24	6.07185280012513606233+002	24	6.07185280012513606233+002
25	6.57167983422663624832+002	25	6.57167983422663624832+002
26	7.09190381843811087909+002	26	7.09190381843811087909+002
27	7.63192519633060478218+002	27	7.63192519633060478218+002
28	8.19194433343539774684+002	28	8.19194433343539774684+002
29	8.77196153320237959397+002	29	8.77196153320237959397+002
30	9.37197704926777010668+002	30	9.37197704926777010668+002
31	9.99199109497752037765+002	31	9.99199109497752037765+002
32	1.06320038508476985762+003	32	1.06320038508476985762+003
33	1.12920154704562578263+003	33	1.12920154704562578263+003
34	1.19720260851458988201+003	34	1.19720260851458988201+003
35	1.26720358077682575175+003	35	1.26720358077682575175+003
36	1.33920447357440243904+003	36	1.33920447357440243904+003
37	1.41320529535241687959+003	37	1.41320529535241687959+003
38	1.48920605346129511087+003	38	1.48920605346129511087+003
39	1.56720675432302192817+003	39	1.56720675432302192817+003
40	1.64720740356863571536+003	40	1.64720740356863571536+003
41	1.72920800615233744521+003	41	1.72920800615233744521+003
42	1.81320805644722123955+003	42	1.81320805644722123955+003
43	1.89920908832504522623+003	43	1.89920908832504522623+003
44	1.9872057522385786296+003	44	1.9872057522385786296+003
45	2.0772100302050656841+003	45	2.0772100302050656841+003
46	2.16921045600194550813+003	46	2.16921045600194550813+003
47	2.26321085506100019881+003	47	2.26321085506100019881+003
48	2.35921122957736754133+003	48	2.35921122957736754133+003
49	2.45721158152521532780+003	49	2.45721158152521532780+003
50	2.5572119126839328335+003	50	2.5572119126839328335+003
51	2.65921222466076917672+003	51	2.65921222466076917672+003

PROLATE EIGENVALUES $M = 4.00$

$M = 0$		$M = 1$		$M = 2$	
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
0	3.172067422 9740079178+000	2	4.39959306716550610460+000	2	7.90386094960177934103+000
1	9.81059438408889228243+000	3	1.19487193838235199217+001	3	1.6812958507566497275+001
2	1.5062999961890920295+001	4	1.94652605398663018170+001	4	2.62934866181611183053+001
3	2.1048960649428551947+001	5	2.79118816815852959602+001	5	3.6994267500847300216+001
4	2.8596854734673102320+001	6	3.80056342033554609182+001	6	4.93442222843697206430+001
5	3.6567137916917027410+001	7	5.0021381281405099034+001	7	6.3537753434877069234+001
6	5.0252697757141587909+001	8	6.4022299644030492619+001	8	7.96524822373246331374+001
7	6.4786115975410890455+001	9	8.00200292670794904112+001	9	9.77292401081894085442+001
8	8.03432348032347017667+001	10	9.8317426176192339212+001	10	1.17782643737819265885+002
9	9.81138095802942828802+001	11	1.18015044938286634060+002	11	1.39821414058064239730+002
10	1.180926736722533303+002	12	1.40013009594547390127+002	12	1.63850513278941086070+002
11	1.400769434148273151+002	13	1.64011306298760489011+002	13	1.89812946244230068783+002
12	1.6064955626894972735+002	14	1.90009887387849191433+002	14	2.1789062510911936097+002
13	1.9005565967430984236+002	15	2.18008702753553812638+002	15	2.47904816878169328950+002
14	2.180440420 9861607808+002	16	2.48007708616543248803+002	16	2.79916389720938627798+002
15	2.480420190 8773913995+002	17	3.14008155211827483081+002	17	3.139259559935829243+002
16	2.8003703771255959836+002	18	3.14008155211827483081+002	18	3.49933956457175831496+002
17	3.1403249452917231524+002	19	3.5005544226677469470+002	19	3.87940718217127764139+002
18	3.50294111356 393205+002	20	3.88005017873722283788+002	20	4.27946485091415625710+002
19	3.880264542 2571853626+002	21	4.2800456162631172811+002	21	4.69951445769350320356+002
20	4.280239225 4420942965+002	22	4.70003615147884521537+002	22	5.13955743192303390813+002
21	4.700217382 3740891196+002	23	5.14003615147884521537+002	23	5.59959491515009108411+002
22	5.140194044 494843978+002	24	5.600035079772381196+002	24	6.07902780867285278696+002
23	5.600181010 399390722+002	25	6.0800323590184162168+002	25	6.57995683544148186072+002
24	6.080167216 267257782+002	26	6.58002994011231587377+002	26	7.09968258094085541888+002
25	6.580154314 412673401+002	27	7.10002778000383088683+002	27	7.6397055235089743051+002
26	7.100142851 18780566722+002	28	7.640025843338697616+002	28	8.19972605710715746386+002
27	7.640132620 970177799+002	29	8.20002410088069102080+002	29	8.77974450862445567308+002
28	8.200123451 0751343994+002	30	8.78002252748964336333+002	30	9.37976115116613903152+002
29	8.780115202 6057668280+002	31	9.88002110222522354904+002	31	9.99977621436061204408+002
30	9.880107754 3332232046+002	32	1.00000198071951873044+003	32	1.06397898924303458023+003
31	1.000010100 4965636666+003	33	1.06400186271085615645+003	33	1.12998023505612928861+003
32	1.064009487 3595402570+003	34	1.13003175488384940583+003	34	1.1979813729972399971+003
33	1.130039328 7613045614+003	35	1.19800165613667668067+003	35	1.2679824519799997018+003
34	1.198004417 4060716242+003	36	1.26800156539991189982+003	36	1.33998337212758229029+003
35	1.268007948 624591472+003	37	1.34000148191191521599+003	37	1.41398425285973934386+003
36	1.340007518 7592000631+003	38	1.4140014049001953572+003	38	1.4899850529019066143+003
37	1.414007122 0581614533+003	39	1.49000133741480613633+003	39	1.56798581631601672615+003
38	1.490006756 731960779+003	40	1.56800126778494169868+003	40	1.64798651198389948676+003
39	1.568006418 175236195+003	41	1.64800120680773851196+003	41	1.72998715761217195207+003
40	1.648006174 5267904316+003	42	1.73000149738823869393+003	42	1.8139877578955877251+003
41	1.730005813 1297972955+003	43	1.81400109678437515703+003	43	1.8999883169893556318+003
42	1.814005543 0826738816+003	44	1.90000104739440039900+003	44	1.98798883858303377122+003
43	1.900005290 867268260+003	45	1.9880010012703392085+003	45	2.07798932596146265430+003
44	1.988005055 0462934831+003	46	2.07800095809367634762+003	46	2.1699897 8205707908104+003
45	2.078004835 893548078+003	47	2.17000091765483965743+003	47	2.2639902049436416977+003
46	2.170004629 3081490387+003	48	2.2640008791658322217+003	48	2.35999061062789920746+003
47	2.264004364 7144529642+003	49	2.3600008407744703084+003	49	2.45799098757503954233+003
48	2.360004255 397222397+003	50	2.45800081055580465071+003	50	2.5579913422440007533+003
49	2.458004044 9514088474+003	51	2.55800077898757174414+003	51	2.65999167635847642073+003

PROLATE EIGENVALUES M = 4.20

4 = 0

L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
0	3.37775063328640432481+000	1	4.58671645538795326367+000	2	8.06674820759008348254+000	2	8.06674820759008348254+000
1	1.0424646185397061868+001	2	1.2468993348433328818+001	3	1.725423089526191913789+001	3	1.725423089526191913789+001
2	1.62349434024961752937+001	3	2.02018327162806093566+001	4	2.69139428696007539859+001	4	2.69139428696007539859+001
3	2.2051504132159171353+001	4	2.73384829333179270645+001	5	3.77104417084985961563+001	5	3.77104417084985961563+001
4	2.95341671571950467617+001	5	3.88471415256850471335+001	6	5.01027267612480644527+001	6	5.01027267612480644527+001
5	3.92603977910180376928+001	6	5.086181315192873682+001	7	6.43161005350064074026+001	7	6.43161005350064074026+001
6	5.112218678060775815+001	7	6.48590793369168963642+001	8	8.04447203373100816631+001	8	8.04447203373100816631+001
7	6.504230758543449314+001	8	8.08537777464453321181+001	9	9.8528651482717794568+001	9	9.8528651482717794568+001
8	8.099100327494449127+001	9	9.88487398356410287460+001	10	1.18586714369843947692+002	10	1.18586714369843947692+002
9	9.8958333935214720672+001	10	1.1884473750491350141+002	11	1.40828690112851600369+002	11	1.40828690112851600369+002
10	1.1493059478822050867+002	11	1.2084068405691042954+002	12	1.64660094652372699588+002	12	1.64660094652372699588+002
11	1.4091183775173022516+002	12	1.24688103961337458831+002	13	1.90884244826422849866+002	13	1.90884244826422849866+002
12	1.6489750422979898666+002	13	1.90835755228227058742+002	14	2.18703239633407074128+002	14	2.18703239633407074128+002
13	1.908629757648942791+002	14	2.18833616128453804271+002	15	2.48718463680418141041+002	15	2.48718463680418141041+002
14	2.19877366247249022165+002	15	2.18832232277892085931+002	16	2.80730862270404335640+002	16	2.80730862270404335640+002
15	2.488701313267281722+002	16	2.80830847950944427607+002	17	3.14741095737834979865+002	17	3.14741095737834979865+002
16	2.8086418746834352800+002	17	3.14829702199083476398+002	18	3.5074965464873503276+002	18	3.5074965464873503276+002
17	3.14859243920293085451+002	18	3.14829702199083476398+002	19	3.88756879175768303162+002	19	3.88756879175768303162+002
18	3.5085508778578250912+002	19	3.88827886708203830000+002	20	4.2876303739397093478+002	20	4.2876303739397093478+002
19	3.8885159772451843404+002	20	4.2882716166551523500+002	21	4.70768330572662402295+002	21	4.70768330572662402295+002
20	4.28848539202931348125+002	21	4.7082633071674828180+002	22	5.14772914388946243483+002	22	5.14772914388946243483+002
21	4.708459332266995157+002	22	5.148259791665959975+002	23	5.60776910833876583362+002	23	5.60776910833876583362+002
22	5.1484366901990161444+002	23	5.608259361532113953+002	24	6.08780416635782822226+002	24	6.08780416635782822226+002
23	5.6084168927936750569+002	24	6.08825064640972875808+002	25	6.58783509313426357912+002	25	6.58783509313426357912+002
24	6.0883994820357760250+002	25	6.58824683501409991394+002	26	7.10786251596354232810+002	26	7.10786251596354232810+002
25	6.5884384091974003944+002	26	7.108243351649756214+002	27	7.64788694698402931971+002	27	7.64788694698402931971+002
26	7.108370414222537227+002	27	7.64824039004311862515+002	28	8.20790880773256899794+002	28	8.20790880773256899794+002
27	7.6483582395622888087+002	28	8.20823765232924799332+002	29	8.78792844778246045977+002	29	8.78792844778246045977+002
28	8.2084347270769595720+002	29	8.78823318225746517661+002	30	9.38794615904377203454+002	30	9.38794615904377203454+002
29	8.7883374304884536207+002	30	9.3882339462702598624+002	31	1.00079621868455708346+003	31	1.00079621868455708346+003
30	9.3883285448508620994+002	31	1.00082309157911468589+003	32	1.06479767386039639418+003	32	1.06479767386039639418+003
31	1.0008320491592193328+003	32	1.06482290667700799634+003	33	1.13079899906602684715+003	33	1.13079899906602684715+003
32	1.0648330411469453663+003	33	1.1308237737386377018+003	34	1.19880020937188588443+003	34	1.19880020937188588443+003
33	1.1308330501426326157+003	34	1.19882558313503391153+003	35	1.26880131772038046146+003	35	1.26880131772038046146+003
34	1.1308330501426326157+003	35	1.26882244118892461613+003	36	1.3408023352737054570+003	36	1.3408023352737054570+003
35	1.2688299421446402594+003	36	1.340823105887239174+003	37	1.41480327171759946133+003	37	1.41480327171759946133+003
36	1.2688299421446402594+003	37	1.41482219016094032692+003	38	1.49080413545791153381+003	38	1.49080413545791153381+003
37	1.41482219016094032692+003	38	1.49082078879422866738+003	39	1.56880493384891720396+003	39	1.56880493384891720396+003
38	1.49082078879422866738+003	39	1.56882197584378466317+003	40	1.64880567333336858880+003	40	1.64880567333336858880+003
39	1.56882197584378466317+003	40	1.64882188026141742472+003	41	1.73080635957770597114+003	41	1.73080635957770597114+003
40	1.64882188026141742472+003	41	1.73082179143242105939+003	42	1.814808759177129213333+003	42	1.814808759177129213333+003
41	1.73082179143242105939+003	42	1.8148217097369396268+003	43	1.9088081460745924480+003	43	1.9088081460745924480+003
42	1.8148217097369396268+003	43	1.90882163162441255069+003	44	2.07880866398900553697+003	44	2.07880866398900553697+003
43	1.90882163162441255069+003	44	1.90882155960458467060+003	45	2.17080914863614532045+003	45	2.17080914863614532045+003
44	1.90882155960458467060+003	45	2.07882149223969834655+003	46	2.26480960280945350150+003	46	2.26480960280945350150+003
45	2.07882149223969834655+003	46	2.17082142913793918980+003	47	2.36081002901480228379+003	47	2.36081002901480228379+003
46	2.17082142913793918980+003	47	2.26482136994777667450+003	48	2.45881042950534725279+003	48	2.45881042950534725279+003
47	2.26482136994777667450+003	48	2.360821314353310521108+003	49	2.55881080631154380665+003	49	2.55881080631154380665+003
48	2.360821314353310521108+003	49	2.45882126706905407228+003	50	2.660811116126706009681+003	50	2.660811116126706009681+003
49	2.45882126706905407228+003	50	2.3608212121838336308349+003				
50	2.3608212121838336308349+003						

PRBLATE EIGENVALUES H = 4.40

M = J

M = 1

M = 2

L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
0	3.28259551727724933539+000	1	4.77562480228950805447+000	2	8.23287544038088295844+000
1	1.10457294216797333253+001	2	1.29996234070532667263+001	3	1.77080518441257595757+001
2	1.790199825262308984+001	3	2.0965116786352412939+001	4	2.7550709099288876211+001
3	2.3108867845361984753+001	4	2.9599606626248791248+001	5	3.84577787878426553398+001
4	3.0537604775335562175+001	5	3.97330328886510695277+001	6	5.08988218259545168818+001
5	4.02048942751943601504+001	6	5.1746622904525723459+001	7	6.5135833010777153459+001
6	5.20399652646611405621+001	7	6.57396100844415078746+001	8	8.12770684471941249706+001
7	6.5943736410917265250+001	8	8.137305144287473731055+001	9	9.9384381498661499923+001
8	8.182762954434069901+001	9	9.9722508636557599241+001	10	1.19431245344920740979+002
9	9.984101686598171710+001	10	1.19715934240914655928+002	11	1.41476445265154365282+002
10	1.1481107782630436896+002	11	1.171053698455332248+002	12	1.65510138476370251488+002
11	1.417886361611922826+002	12	1.65706358533805808109+002	13	1.91355976753487325591+002
12	1.6577184341474226217+002	13	1.1702878381357510898+002	14	2.19556254565858303370+002
13	1.917585971910401396+002	14	2.1970021805001138016+002	15	2.49572478064995353496+002
14	2.1974797421681513851+002	15	2.4969785471636041444+002	16	2.81585671420603878042+002
15	2.4973939995521039573+002	16	2.81695674982089570400+002	17	3.1559655200760024908+002
16	2.8173235611960626518+002	17	3.15694004624220385001+002	18	3.516056352163286388035+002
17	3.15726498040970050984+002	18	3.16992583709053684425+002	19	3.89613299246723412525+002
18	3.517215730813440000+002	19	3.59691365778653694259+002	20	4.29619827379625700048+002
19	3.8971739264400934940+002	20	4.29690314489472337010+002	21	4.71625434993685769550+002
20	4.297381363635259100+002	21	4.716894011467501233688+002	22	5.15630288466442528841+002
21	4.7170729762759063199+002	22	5.1568002889764793133+002	23	5.61634518007490793397+002
22	5.157080429001542424+002	23	5.61687901347662264998+002	24	6.09638226744346967416+002
23	5.6175669761913349874+002	24	6.09687261335987352381+002	25	6.59641497241690000485+002
24	6.09703634416740661522+002	25	6.59686731601170074810+002	26	7.11644396253317728222+002
25	6.5970181061243575757+002	26	7.11686241246729835554+002	27	7.65646978235758022999+002
26	7.1170019129836403607+002	27	7.656850229373767112+002	28	8.21649287980295890863+002
27	7.6569874421434251466+002	28	8.21685407841275870496+002	29	8.79651362608172059016+002
28	8.2169744271839270185+002	29	8.7968552102016776517+002	30	9.39653233099860245068+002
29	8.7969628233671131301+002	30	9.39684730194705227889+002	31	1.00165492547882757602+003
30	9.3969522958753383590+002	31	1.00168443708008146498+003	32	1.06565646173670177540+003
31	1.0016942752910429378+003	32	1.0656841719302377937+003	33	1.13165786056247420275+003
32	1.0656934086670996407+003	33	1.13168392902389495727+003	34	1.19665913792194502023+003
33	1.13169261808214414887+003	34	1.19668370666191988744+003	35	1.26966030752103562828+003
34	1.1966918963850335262+003	35	1.26968350259875538317+003	36	1.34166133118282525853+003
35	1.26969123441153332193+003	36	1.3416833148645135312+003	37	1.41566236914511856492+003
36	1.3416906262272550331+003	37	1.41568314182871865773+003	38	1.49166328031435127983+003
37	1.41569006614294056051+003	38	1.4916829819430255151+003	39	1.56966412246622370157+003
38	1.49168954922621220213+003	39	1.56968283392916966101+003	40	1.64966490241449040403+003
39	1.56968907114630769342+003	40	1.6496869664308557139+003	41	1.73166562615059867450+003
40	1.6496886281088094742+003	41	1.7316825697494040968+003	42	1.81566628896019351697+003
41	1.7316882167632449702+003	42	1.8156845033071206098+003	43	1.9016669255207536663+003
42	1.81568783416142983102+003	43	1.90168233961664750635+003	44	1.98966750998392206736+003
43	1.9016874778383732630+003	44	1.9896823622609455468+003	45	2.07966805604480625679+003
44	1.98968714500420053708+003	45	2.07968213952830330193+003	46	2.1716685670012062129+003
45	2.0796868344960212087+003	46	2.17168204895886844055+003	47	2.26566904580379194952+003
46	2.1716865429681334677+003	47	2.26568196401154390088+003	48	2.36166049509912460534+003
47	2.26568627010151458280+003	48	2.36168488423120963493+003	49	2.45966991726656539319+003
48	2.36168601396011809415+003	49	2.4596848002708022960+003	50	2.55966731445004993080+003
49	2.45968577730430139579+003	50	2.55968173857110845079+003	51	2.66167068858553620571+003

PROLATE EIGENVALUES $M = 4.60$ $M = 0$

EIGENVALUE

L

3.78742741956673378624*000
 1.16678196937374894036*001
 1.816815144419380842*001
 2.421910098640115216/4*001
 3.159653229363706829/4*001
 4.1201901231969175077*001
 5.3003795966959510843*001
 6.68909193012432605563*001
 8.281889836296946233*001
 1.0076965586701/817963*002
 1.207343659044194335*002
 1.42708159271009131418*002
 1.66688142224879283744*002
 1.9267249683984660684*002
 2.20660030690921191624*002
 2.5064993374352242527*002
 2.82641439648008322549*002
 3.16634741975889086343*002
 3.5262894322426234461*002
 3.90624021303179767811*002
 4.3061980752298940721*002
 4.726161720234654152/3*002
 5.1661301354295/8865/1*002
 5.62610251942662164785*002
 6.106078334268283544*002
 6.606056782387088654*002
 7.1260376663730039653*002
 7.66602066212251402528*002
 8.22600540525830033034*002
 8.80599167900710337494*002
 9.405979285161525071/1*002
 1.00259430558475372046*003
 1.06659678514942685022*003
 1.1325948541161523191*003
 1.20059400474946173/8*003
 1.2705932259731195263*003
 1.34259250931752654314*003
 1.4165918497460852484*003
 1.492591241456062269*003
 1.5705900780375032157*003
 1.650590157803747408*003
 1.732589672370499521*003
 1.8165892223005830131*003
 1.9025884027746233063*003
 1.990588411407337274*003
 2.0405880451954722302*003
 2.125877024137606996*003
 2.26587331907223306*003
 2.3625870765740252587*003
 2.4605867962363/840412*003

 $M = 1$

EIGENVALUE

L

4.96603213815058711605*000
 1.353963035037800000647*001
 2.1753367527790528426*001
 3.0502685397960030719*001
 4.06663703605089996935*001
 5.25762850469137409864*001
 6.66642130033854084630*001
 8.2650565856916782520*001
 1.00639977947453714462*002
 1.2062965000568870672*002
 1.426220365651630593*002
 1.66616230526207301430*002
 1.92611395144348505310*002
 2.20607440107488160743*002
 2.50604171531816273269*002
 2.82603443529393383096*002
 3.1659914565916736173*002
 3.5259193596712795818*002
 3.905952225696732525*002
 4.3059408094060634788*002
 4.7259282973562470542*002
 5.1659173694336102118*002
 5.625907707162601648*002
 6.105892960565192767*002
 6.6058917774076135067*002
 7.12589507739186242647*002
 7.6658790816323022144*002
 8.2258736954852083010*002
 8.8058683901128991017*002
 9.4058444559344526336*002
 1.002586058294944956*003
 1.0665856828739080958*003
 1.13258535154990220863*003
 1.2005850489823337693*003
 1.27058477004336129693*003
 1.34258451411884529789*003
 1.41658427820359342623*003
 1.4925840602696811650*003
 1.5705838543912550513*003
 1.65058367144789724584*003
 1.73258349761583144339*003
 1.8165833358213370044*003
 1.90258318498006481042*003
 1.99058304412685941965*003
 2.0405829124003978270*003
 2.1258278903007700296*003
 2.26582567332482404023*003
 2.3625825646346331446*003
 2.460524624863944737*003
 2.5605236628842301676*003

 $M = 2$

EIGENVALUE

L

8.401926566733373717893*000
 1.8173525274989808903*001
 2.82267940747092038631*001
 3.92376893323845682477*001
 5.1732422317132050083*001
 6.59950866993720075305*001
 8.21497014730910010435*001
 1.00248781183025730378*002
 1.20316417748694857522*002
 1.4236483207425938863*002
 1.66400780764218914398*002
 1.92428262947290072979*002
 2.2044977544454182585*002
 2.5046695140633501411*002
 2.82480903318896274495*002
 3.16492389949768646207*002
 3.52501968099187920315*002
 3.90510042037294634460*002
 4.30516913601967333756*002
 4.72522812026554021792*002
 5.16527914053749944797*002
 5.62532357804818525522*002
 6.1053625253461177913*002
 6.60539685614838338539*002
 7.12542727616472359839*002
 7.66545436058612187155*002
 8.2254785821427066039*002
 8.80550033233690631864*002
 9.40551993769758590911*002
 1.002553767234949747*003
 1.0665537678255111453*003
 1.13255684207937921103*003
 1.20055817991927317129*003
 1.2705594071388483540*003
 1.34256052888810395299*003
 1.41656156320077460921*003
 1.4925625170064473512*003
 1.57056339847026671732*003
 1.65056421474536467699*003
 1.73256497212007024206*003
 1.81656567614067686786*003
 1.90256633171430712063*003
 1.99056694319548535944*003
 2.04056751445930736571*003
 2.1256804896353110005*003
 2.26565854980146826320*003
 2.36256901974720446614*003
 2.46056946129439574336*003
 2.56056987668966505848*003
 2.66257026796144226656*003

PROLATE EIGENVALUES M = 4.00

M = 0			M = 1			M = 2		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	3.99150025020044753817+000	1	5.15769824623971302612+000	2	8.57361336879370149203+000	0	8.57361336879370149203+000	0
1	1.229092785470370701+001	2	1.40977598215695705180+001	3	1.80497760391306550638+001	1	1.80497760391306550638+001	1
2	1.91649512654170050068+001	3	2.2564799000361028851+001	4	2.89171711680540510031+001	2	2.89171711680540510031+001	2
3	2.5379601545570589005+001	4	3.14438194504608156486+001	5	4.0049637840453568317+001	3	4.0049637840453568317+001	3
4	3.27160886995915230+001	5	4.1638292966704249885+001	6	5.2603398363959532380+001	4	5.2603398363959532380+001	4
5	4.2252784327421816092+001	6	5.36512105754907246148+001	7	6.8939687553971348026+001	5	6.8939687553971348026+001	5
6	5.4017500035399105261+001	7	6.73329161121830522+001	8	8.30627943570598862361+001	6	8.30627943570598862361+001	6
7	6.78844043640247504355+001	8	8.36142712248472199329+001	9	1.0116988594176125097+002	7	1.0116988594176125097+002	7
8	8.379809882735551233+001	9	1.01598451831662849752+002	10	1.21242394459934008769+002	8	1.21242394459934008769+002	8
9	1.0142066704230380964+002	10	1.2158504879355165229+002	11	1.4329400979620222441+002	9	1.4329400979620222441+002	9
10	1.2170071396052893601+002	11	1.4357586544075331382+002	12	1.67332163218101186859+002	10	1.67332163218101186859+002	10
11	1.43670017827689882890+002	12	1.67567887885732632315+002	13	1.933612295702223633+002	11	1.933612295702223633+002	11
12	1.6764657769490113346+002	13	1.93561450233842704167+002	14	2.21383920973516471979+002	12	2.21383920973516471979+002	12
13	1.93628259878603147872+002	14	2.2155619495070899819+002	15	2.5140198330324201235+002	13	2.5140198330324201235+002	13
14	2.21613668019022550155+002	15	2.51551863232981526053+002	16	2.8341664801553537469+002	14	2.8341664801553537469+002	14
15	2.5160184674921785763+002	16	2.83548251333106304612+002	17	3.17428694640283672855+002	15	3.17428694640283672855+002	15
16	2.8359213335769727705+002	17	3.1754521371232491337+002	18	3.53438726748747530900+002	16	3.53438726748747530900+002	16
17	3.1758406865603636084+002	18	3.53542633101862791473+002	19	3.91447174077051533533+002	17	3.91447174077051533533+002	17
18	3.5357727793642434452+002	19	3.91540426440675319686+002	20	4.31454356681261967593+002	18	4.31454356681261967593+002	18
19	3.9157151296838768702+002	20	4.3158524691325079883+002	21	4.73460517110592760192+002	19	4.73460517110592760192+002	19
20	4.315665856305779118+002	21	4.73536874676281137698+002	22	5.17465842026831246208+002	20	5.17465842026831246208+002	20
21	4.7356233083195332320+002	22	5.1753543206627108556+002	23	5.6347047706579979837+002	21	5.6347047706579979837+002	21
22	5.1755863335336819086+002	23	5.63534169497407392749+002	24	6.11474537261734724888+002	22	6.11474537261734724888+002	22
23	5.6355404241191318955+002	24	6.1153053255760864290+002	25	6.61478114492680100840+002	23	6.61478114492680100840+002	23
24	6.1152560250576799827+002	25	6.61532063252180726417+002	26	7.13481282885490216193+002	24	7.13481282885490216193+002	24
25	6.615500474574809500107+002	26	7.1353118141971112300+002	27	7.67486102797680347356+002	25	7.67486102797680347356+002	25
26	7.1354781504326268250+002	27	7.67530392143569141703+002	28	8.23486623790631442554+002	26	8.23486623790631442554+002	26
27	7.6754582275576739901+002	28	8.2352968340622455326+002	29	8.814888687686202411+002	27	8.814888687686202411+002	27
28	8.2354403262720570799+002	29	8.81529044519670367555+002	30	9.41490928237412472522+002	28	9.41490928237412472522+002	28
29	8.61542430928392878701+002	30	9.41528466630449096203+002	31	1.00349277054927902840+003	29	1.00349277054927902840+003	29
30	9.4154098052551498040+002	31	1.00352794223943266302+003	32	1.06749444401212503834+003	30	1.06749444401212503834+003	30
31	1.00353968649011269715+003	32	1.06752745496157166124+003	33	1.13349596719745785152+003	31	1.13349596719745785152+003	31
32	1.0675384722350564042+003	33	1.133527039333243514+003	34	1.20149735762404433312+003	32	1.20149735762404433312+003	32
33	1.1335373832263002800+003	34	1.20152626488620418053+003	35	1.27149883034384773732+003	33	1.27149883034384773732+003	33
34	1.201536862422321918+003	35	1.27152626488620418053+003	36	1.3434997983223797994+003	34	1.3434997983223797994+003	34
35	1.27153547671554970527+003	36	1.34352592849798424951+003	37	1.41750087278233031836+003	35	1.41750087278233031836+003	35
36	1.34353463870120984280+003	37	1.41752561843681206952+003	38	1.49350186347812000868+003	36	1.49350186347812000868+003	36
37	1.4175338671113548994+003	38	1.4935253203110370032+003	39	1.57150277892115467762+003	37	1.57150277892115467762+003	37
38	1.4935331549682876522+003	39	1.57152506693904421204+003	40	1.6515032656566870349+003	38	1.6515032656566870349+003	38
39	1.57153249636801163380+003	40	1.65152482110102456314+003	41	1.73350441296286326882+003	39	1.73350441296286326882+003	39
40	1.651531860252379002+003	41	1.65152482110102456314+003	42	1.815750514388938768708+003	40	1.815750514388938768708+003	40
41	1.7335313934538765244+003	42	1.7335245926997622924+003	43	1.90350582445494137191+003	41	1.90350582445494137191+003	41
42	1.8175307226445233133+003	43	1.81752438012747929291+003	44	1.99150645919279408561+003	42	1.99150645919279408561+003	42
43	1.90353030117380332932+003	44	1.90352396991707891809+003	45	2.0815070521352609222+003	43	2.0815070521352609222+003	43
44	1.9915298428687099018+003	45	2.0815238387552052076+003	46	2.26750812665311926163+003	44	2.26750812665311926163+003	44
45	2.0815294144641072981+003	46	2.173523661806660444+003	47	2.3635086143306557171+003	45	2.3635086143306557171+003	45
46	2.17352903349634266850+003	47	2.26752350983558104171+003	48	2.46150907250980176269+003	46	2.46150907250980176269+003	46
47	2.26752863759288159141+003	48	2.3635233671109546927+003	49	2.56150930352688529955+003	47	2.56150930352688529955+003	47
48	2.36352828473032546176+003	49	2.4615232329081637235+003	50	2.663509090949102696903+003	48	2.663509090949102696903+003	48
49	2.4615279530638342655+003	50	2.561523110656281412881+003			49		49

PRGLATE EIGENVALUES M = 5.00

M = 0			M = 1			M = 2		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	4.195128E7261637171949+000	1	5.35042229E46413303293+000	2	8.74767425153947245198+000	2	8.74767425153947245198+000	2
1	1.2911702245043397900+001	2	1.4642556244868199202+001	3	1.91359819110357872642+001	3	1.91359819110357872642+001	3
2	2.01765147202332672891+001	3	2.3397613124481035325+001	4	2.96267861339324382114+001	4	2.96267861339324382114+001	4
3	2.65872556073974737462+001	4	3.2421933580803192965+001	5	4.0829326879267345045+001	5	4.0829326879267345045+001	5
4	3.38971964944675884695+001	5	4.265818215386687119+001	6	5.3511570265330355204+001	6	5.3511570265330355204+001	6
5	4.3359595212287782573+001	6	5.4671796707882892579+001	7	6.78325560546929512307+001	7	6.78325560546929512307+001	7
6	5.0805622375137725374+001	7	6.46472803783972129377+001	8	8.401651945956608867+001	8	8.401651945956608867+001	8
7	6.89247725506172714096+001	8	8.46219834761041543208+001	9	1.02131881351093370951+002	9	1.02131881351093370951+002	9
8	8.4825530813598220890+001	9	1.0260121526176378044+002	10	1.2220935980904825110+002	10	1.2220935980904825110+002	10
9	1.0275555131192797975+002	10	1.22584792527796437599+002	11	1.44264140628020299555+002	11	1.44264140628020299555+002	11
10	1.22710388918544013672+002	11	1.44571828053933884615+002	12	1.683044433134167463345+002	12	1.683044433134167463345+002	12
11	1.44674632070057685070+002	12	1.68561506001893275673+002	13	1.9433500797317973951+002	13	1.9433500797317973951+002	13
12	1.6864732497844141971+002	13	1.9455194790547586151+002	14	2.22358801990414154394+002	14	2.22358801990414154394+002	14
13	1.9462004845272118996+002	14	2.22544323843505020725+002	15	2.5237709350300289553+002	15	2.5237709350300289553+002	15
14	2.2269501670310274383+002	15	2.5254045240103397573+002	16	2.8339299449532411512+002	16	2.8339299449532411512+002	16
15	2.52595257900892414164+002	16	2.84534200478302429802+002	17	3.1840555060664011109+002	17	3.1840555060664011109+002	17
16	2.84582957305541339005+002	17	3.18532295656933080898+002	18	3.544159876114045687+002	18	3.544159876114045687+002	18
17	3.18574559732587443166+002	18	3.54520983699039663156+002	19	3.92424764813315887811+002	19	3.92424764813315887811+002	19
18	3.54566614772827942+002	19	3.9252151752644258187+002	20	4.32432219904068063431+002	20	4.32432219904068063431+002	20
19	3.92555555899292301+002	20	4.32523712244666280503+002	21	4.74438608127930649976+002	21	4.74438608127930649976+002	21
20	4.32554215242694141276+002	21	4.74521596482372673500+002	22	5.18444125506872853487+002	22	5.18444125506872853487+002	22
21	4.745626162089571434+002	22	5.18519750332392340387+002	23	5.64448924700000467011+002	23	5.64448924700000467011+002	23
22	5.18544961463700727371+002	23	5.64518129147807127339+002	24	6.12453135094870231024+002	24	6.12453135094870231024+002	24
23	5.64541200764656106+002	24	6.1251499279383042473+002	25	6.6245682978173034600+002	25	6.6245682978173034600+002	25
24	6.1257452245006707379+002	25	6.62514331219436312175+002	26	7.1444500907591779134+002	26	7.1444500907591779134+002	26
25	6.625496791074410893+002	26	7.14514301703338579919+002	27	7.6846304618228616518+002	27	7.6846304618228616518+002	27
26	7.1453236983622747256+002	27	7.6851159144875815806+002	28	8.24465618457344054793+002	28	8.24465618457344054793+002	28
27	7.6853005141358115337+002	28	8.24513384018905895269+002	29	8.82467959099661153974+002	29	8.82467959099661153974+002	29
28	8.24579730860671042+002	29	8.82511566227543467700+002	30	9.42470060082547459192+002	30	9.42470060082547459192+002	30
29	8.8252610393547122349+002	30	9.42510826604929488928+002	31	1.04447196319823717276+003	31	1.04447196319823717276+003	31
30	9.425244156441414355+002	31	1.0451015552707477828+003	32	1.0684733895780986213+003	32	1.0684733895780986213+003	32
31	1.04522254572127544255+003	32	1.06850954480219085004+003	33	1.13447526054408963797+003	33	1.13447526054408963797+003	33
32	1.0452214456561223151+003	33	1.13450594742315930924+003	34	1.2042766942846302758+003	34	1.2042766942846302758+003	34
33	1.2345202100055440221+003	34	1.20250847736834392566+003	35	1.2747800639269333001+003	35	1.2747800639269333001+003	35
34	1.2345219779699192177+003	35	1.27250800544028741198+003	36	1.344479210297559419+003	36	1.344479210297559419+003	36
35	1.2721001045827747496+003	36	1.34450757513430319457+003	37	1.4184803176267612538+003	37	1.4184803176267612538+003	37
36	1.2721001045827747496+003	37	1.41850718253081270665+003	38	1.49448133847021103652+003	38	1.49448133847021103652+003	38
37	1.344517025819664721+003	38	1.43450681620666155565+003	39	1.57248228163677168265+003	39	1.57248228163677168265+003	39
38	1.418515134477239962+003	39	1.57250047710169484691+003	40	1.65248315443641252038+003	40	1.65248315443641252038+003	40
39	1.43451525000677507+003	40	1.65250016275767026821+003	41	1.73448394484320417742+003	41	1.73448394484320417742+003	41
40	1.43451525000677507+003	41	1.65250016275767026821+003	42	1.8104847174235811149+003	42	1.8104847174235811149+003	42
41	1.6525138921564261479+003	42	1.734505876672004717+003	43	1.904584184723553358+003	43	1.904584184723553358+003	43
42	1.734513274484255611+003	43	1.734505876672004717+003	44	1.992486020583405211+003	44	1.992486020583405211+003	44
43	1.8104847174235811149+003	44	1.734505876672004717+003	45	2.08248668255270657086+003	45	2.08248668255270657086+003	45
44	1.904584184723553358+003	45	1.9925015081186384720+003	46	2.17448725367095510642+003	46	2.17448725367095510642+003	46
45	1.9925015081186384720+003	46	2.0825048875518988423+003	47	2.2684877887359129261+003	47	2.2684877887359129261+003	47
46	2.0825048875518988423+003	47	2.1745046803344676209+003	48	2.36448829072635287365+003	48	2.36448829072635287365+003	48
47	2.1745046803344676209+003	48	2.0825048875518988423+003	49	2.46248874231999546454+003	49	2.46248874231999546454+003	49
48	2.2684877887359129261+003	49	2.0825048875518988423+003	50	2.562489259246464388+003	50	2.562489259246464388+003	50
49	2.36448829072635287365+003	50	2.1745046803344676209+003	51	2.66448962371319866226+003	51	2.66448962371319866226+003	51
50	2.46248874231999546454+003							
51	2.562489259246464388+003							

PROBATE EIGENVALUES M = 5.20

M = 1			M = 2		
EIGENVALUE			EIGENVALUE		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
0	4.309326411499709600892+000	1	5.54403700027101127443+000	2	8.92387773340619857120+000
1	1.351202777777777777777+000	2	1.5204269651143320666+001	3	1.96313497267089549863+001
2	1.210000000000000000000+000	3	2.4250014258158799655+001	4	3.030566233612709045+001
3	1.000000000000000000000+000	4	3.3435750288716762178+001	5	4.1768832704874938855+001
4	1.000000000000000000000+000	5	4.372282800000000000000+001	6	5.44367033921955748839+001
5	1.000000000000000000000+000	6	5.5738185307064857596+001	7	6.8810911444702368849+001
6	1.000000000000000000000+000	7	6.9706428548894471844+001	8	8.5011044949263531396+001
7	1.000000000000000000000+000	8	7.5674686323135733688+001	9	1.03135019107270162888+002
8	1.000000000000000000000+000	9	1.0364575959979906193+002	10	1.2321749920939737720+002
9	1.000000000000000000000+000	10	1.3626718442757570912+002	11	1.4527539665249087256+002
10	1.000000000000000000000+000	11	1.4541130551627736916+002	12	1.6911774330088553956+002
11	1.000000000000000000000+000	12	1.6959267713781941635+002	13	1.9534973463352307849+002
12	1.000000000000000000000+000	13	1.955878628530444209+002	14	2.2337454343053727615+002
13	1.000000000000000000000+000	14	2.2357825789341107936+002	15	2.5339419118062272835+002
14	1.000000000000000000000+000	15	2.5357123788841504064+002	16	2.8541005434378789556+002
15	1.000000000000000000000+000	16	2.8556397370738041734+002	17	3.1942304618844240682+002
16	1.000000000000000000000+000	17	3.195649031147051197+002	18	3.55433830381970389567+002
17	1.000000000000000000000+000	18	3.5555533032143069960+002	19	3.9344288606531983076+002
18	1.000000000000000000000+000	19	3.9355277474193921681+002	20	4.3345056219334504233+002
19	1.000000000000000000000+000	20	4.33545712553510929671+002	21	4.754571540106410162+002
20	1.000000000000000000000+000	21	4.755470582381906519+002	22	5.19462819858475510611+002
21	1.000000000000000000000+000	22	5.195447420131729211+002	23	5.65467751685247022336+002
22	1.000000000000000000000+000	23	5.6554720954826783918+002	24	6.1347206114619905224+002
23	1.000000000000000000000+000	24	6.134591635715326717+002	25	6.6347582866362338982+002
24	1.000000000000000000000+000	25	6.63538264156002864+002	26	7.1547922176914059880+002
25	1.000000000000000000000+000	26	7.15539910771882943745+002	27	7.69482209219574978281+002
26	1.000000000000000000000+000	27	7.69534644456763343580+002	28	8.254848739454744329+002
27	1.000000000000000000000+000	28	8.255350747475132678+002	29	8.83487270804415470551+002
28	1.000000000000000000000+000	29	8.8353448266068443925+002	30	9.4348942141014730008+002
29	1.000000000000000000000+000	30	9.435355556486238751+002	31	1.0054911741310012685+003
30	1.000000000000000000000+000	31	1.005527151472885577+003	32	1.069491577002314635+003
31	1.000000000000000000000+000	32	1.06951950135029182+003	33	1.1354947479317324971+003
32	1.000000000000000000000+000	33	1.13551251931895812+003	34	1.2034942431748020952+003
33	1.000000000000000000000+000	34	1.203510613497934614+003	35	1.273497555775933249+003
34	1.000000000000000000000+000	35	1.273500266818071721+003	36	1.34549878651918136414+003
35	1.000000000000000000000+000	36	1.3455294880366225575+003	37	1.41949991831018404130+003
36	1.000000000000000000000+000	37	1.4195589913392632279+003	38	1.49550094152042301133+003
37	1.000000000000000000000+000	38	1.495585325834167874+003	39	1.5735019251924755477+003
38	1.000000000000000000000+000	39	1.573528100724215700+003	40	1.65350287233989437926+003
39	1.000000000000000000000+000	40	1.65352771430308363721+003	41	1.73550154441274492464+003
40	1.000000000000000000000+000	41	1.73552771430308363721+003	42	1.8195044343533613927+003
41	1.000000000000000000000+000	42	1.8195270067639660718+003	43	1.9155051291232101172+003
42	1.000000000000000000000+000	43	1.9155266908818164538+003	44	1.99350579647379012966+003
43	1.000000000000000000000+000	44	1.9935369463124525263+003	45	2.08350641975894970441+003
44	1.000000000000000000000+000	45	2.083561170640076970+003	46	2.1755070278446464652+003
45	1.000000000000000000000+000	46	2.1755258580809179647+003	47	2.26950754895353180773+003
46	1.000000000000000000000+000	47	2.2695561489653658598+003	48	2.3655080111641644642+003
47	1.000000000000000000000+000	48	2.36553864429599866+003	49	2.46350854241342442022+003
48	1.000000000000000000000+000	49	2.46355517163996316063+003	50	2.56350899511210346014+003
49	1.000000000000000000000+000	50	2.56355249654223378727+003	51	2.66550947163924115140+003

PROBATE EIGENVALUES M = 5.40

M = 0		M = 1		M = 2	
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
0	4.60125434629527660831+000	1	5.73841334339940457237+000	2	9.10199576302767832712+000
1	1.41514813171494349598+001	2	1.57708536240496278944+001	3	2.01351131820666422018+001
2	2.3235256442144712891+001	3	2.51204405955060320670+001	4	3.1111498821672600182+001
3	2.61305228154424858363+001	4	3.14837857459003389863+001	5	4.26705270191521697482+001
4	3.144463197127214044+001	5	4.4830551772334595224+001	6	5.5438504699428018376+001
5	4.57435175207412168375+001	6	5.6851119355817476039+001	7	6.98290698823551157764+001
6	5.736101688065115470+001	7	7.0811569449794971496+001	8	8.60465328395724177644+001
7	7.1148666358012766897+001	8	7.67705053692902183089+001	9	1.04179472788344947890+002
8	8.7015605460430392643+001	9	1.04737841350176393265+002	10	1.24267002739702260957+002
9	1.04925327368563322338+002	10	1.2471189553760280464+002	11	1.46327952632252441638+002
10	1.2486084914754101529+002	11	1.466915222100538666423+002	12	1.70372251890100906697+002
11	1.46810560843663139+002	12	1.7067363319616319851+002	13	1.9640555109389908671+002
12	1.7077656410119133258+002	13	1.96662389026852224483+002	14	2.244312687904034411+002
13	1.96748118868793023883+002	14	2.24651841612517870077+002	15	2.54451578079421971324+002
14	2.24725339429979010092+002	15	2.54643166432463051569+002	16	2.8646791764322759159+002
15	2.54707076752095339427+002	16	2.8635952873537832994+002	17	3.2048127278728350993+002
16	2.86660186429451378928+002	17	3.20628894667331834622+002	18	3.564233746511757137+002
17	3.2067545760122977456+002	18	3.5662761416188182335+002	19	3.94501614725532149119+002
18	3.5666617957257438811+002	19	3.946203750524235948+002	20	4.345094733502442233+002
19	3.9465972918627967898+002	20	4.346145985957437822+002	21	4.76516191090397123117+002
20	4.346521557128742097+002	21	4.7661132562757693920+002	22	5.20521982647821181079+002
21	4.766451060811314100+002	22	5.20611470267881056019+002	23	5.6652711066248812642+002
22	5.206359706524307035+002	23	5.6660796501012885782+002	24	6.1453140631273750015+002
23	5.666349531176903959+002	24	6.1460755157641164345+002	25	6.64535271344511870246+002
24	6.14630477753736101+002	25	6.646079626051198971+002	26	7.165384883387186429+002
25	6.646262954332875238+002	26	7.166005179677066641+002	27	7.7054172533458666728+002
26	7.1662317443293955647+002	27	7.7060491748526294688+002	28	8.265443721411732982+002
27	7.7062006169919886212+002	28	8.2659091077730044629+002	29	8.8454686823272221287+002
28	8.266171008685421201+002	29	8.8459782885810785743+002	30	9.445975650453378626+002
29	8.84614816587153197489+002	30	9.4459687477593184024+002	31	1.00655103380478701102+003
30	9.4461265165117714038+002	31	1.006555620299372728+003	32	1.0705282574004037124+003
31	1.006619525436440641+003	32	1.07059470583227715118+003	33	1.13655445566498324279+003
32	1.0706068716090934601+003	33	1.1365838503983385314+003	34	1.20455594240700189078+003
33	1.13660658189111293436+003	34	1.2045330633360977316+003	35	1.2745573034335245761+003
34	1.20460543730772665672+003	35	1.27452341820624964+003	36	1.3465854956433634638+003
35	1.27460102173782612286+003	36	1.34659167811218392407+003	37	1.42055969624778581172+003
36	1.3466027211947959909+003	37	1.42051106656710591144+003	38	1.4965667528632590302+003
37	1.4206015235381158432+003	38	1.4965050175612884454+003	39	1.5745617289215465303+003
38	1.49660041810915898383+003	39	1.5745199750432689759+003	40	1.65456263217965679647+003
39	1.5745592589494571418+003	40	1.6545194943525798005+003	41	1.73656346981062518871+003
40	1.654558448534306937+003	41	1.7365900440889987188+003	42	1.820564248475300621+003
41	1.736557568955181035+003	42	1.820586257192432935+003	43	1.90656497238767646214+003
42	1.8205567508403798687+003	43	1.906582344792952055+003	44	1.99456564771952168363+003
43	1.9065558859033186427+003	44	1.9945786580018548497+003	45	2.08456627837854010506+003
44	1.994552723057702555+003	45	2.0845752879495938997+003	46	2.1765668623194666947+003
45	2.0845546132794288247+003	46	2.1765720545917434799+003	47	2.270567427341431163+003
46	2.1765536899220715278+003	47	2.2705669059978350330+003	48	2.368564293681941099+003
47	2.2705534645656377650+003	48	2.3685666279662302289+003	49	2.4645684247697798532+003
48	2.368556587744420409+003	49	2.464563644019645841+003	50	2.564568883585019524+003
49	2.464555224398286601403+003	50	2.564558611550198154046+003	51	2.6665693146933077522+003

PR3LATE EIGENVALUES, M = 5.60

M = 0		M = 1		M = 2	
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
1	4.8038442727084407622+000	1	5.9334597535640598411+000	2	9.28185194247344922343+000
2	1.4769216250299901592+001	2	1.6341561260500325996+001	3	2.0646625089865912192+001
3	2.32711424652044081769+001	3	2.60065802350055594470+001	4	3.1880290418244139431+001
4	3.04580927231229914492+001	4	3.5564456820654795414+001	5	4.36031421513200471175+001
5	3.78104627090022971771+001	5	4.59825633282178957366+001	6	5.64566163143372620827+001
6	4.70245547634174403602+001	6	5.80110997682476296225+001	7	7.08870352272962083276+001
7	5.8579817397422687925+001	7	7.19627740855655203651+001	8	8.712131367657159067636+001
8	7.2334542724454552038+001	8	8.7912844571693446277+001	9	1.05265436880532159242+002
9	8.6180134258580007281+001	9	1.05872348667984656538+002	10	1.2535806470332353731+002
10	1.0676302743114628354+002	10	1.2584600144218031937+002	11	1.47421989043908563457+002
11	1.240223023744133460+002	11	1.47815708643620561636+002	12	1.71468122340154064406+002
12	1.4547367052246290618+002	12	1.7179599058754238325+002	13	1.975026039944705272+002
13	1.719051164600326870+002	13	1.977801731714455002+002	14	2.2552911288866154735+002
14	1.9787283443591721964+002	14	2.25767323524669331395+002	15	2.5554996648452909020+002
15	2.28846613764445247830+002	15	2.5575676105390249617+002	16	2.8756669159351457343+002
16	2.582574329002927346+002	16	2.5774798204405880999+002	17	3.2158032596830702909+002
17	2.878064444125211320+002	17	3.27474612253821929353+002	18	3.57591996372794121961+002
18	3.27940674547500413+002	18	3.57734368839421945460+002	19	3.95601027342706594387+002
19	3.5771977626286804818+002	19	3.9572603558822109733+002	20	4.356090031443523475+002
20	3.957717199099983363+002	20	4.35724445228626507134+002	21	4.77615812191721623355+002
21	4.3574253531377405943+002	21	4.777246667855035333+002	22	5.21621673840838527333+002
22	4.775535674303060269+002	22	5.21716997041529207600+002	23	5.6766757953212968091+002
23	5.21748776708140404769+002	23	5.67713953035593701084+002	24	6.1663119759091187168+002
24	5.67743022123516189910+002	24	6.15711268137786293266+002	25	6.6563509889548952722+002
25	6.15737961093127808745+002	25	6.6570888712508313046+002	26	7.17638944664552523962+002
26	6.65733479466814961+002	26	7.1770769280204531+002	27	7.716416052291979290+002
27	7.1772553463729813244+002	27	7.7170487503936320549+002	28	8.27644335959327938133+002
28	7.7172566545499122213+002	28	8.27701740866682079+002	29	8.85646782265535647407+002
29	8.2772277291355983749+002	29	8.85701641188214927448+002	30	9.45648984520429236952+002
30	8.857159225355509764+002	30	9.4570255195858790917+002	31	1.0076509726136514645+003
31	9.45717346229999921097+002	31	1.0076599790557440208+003	32	1.07165277415689378444+003
32	1.007715009998496132+003	32	1.0716978538986821943+003	33	1.13785441192602873449+003
33	1.071712610276854452+003	33	1.1376680599275421678+003	34	1.205555905054394115+003
34	1.13771054313751360412+003	34	1.13766585486435176756+003	35	1.275452707888040905+003
35	1.205709171765024024+003	35	1.2056585486435176756+003	36	1.3478585290370068033+003
36	1.275707548353524336+003	36	1.27565497874379290702+003	37	1.4216596736937433731+003
37	1.4277060564513577310+003	37	1.42765417316669274964+003	38	1.49766073392994376817+003
38	1.4977064633599857032+003	38	1.4976574512730876623+003	39	1.57566171291463695105+003
39	1.4977034157220062720+003	39	1.5756521168480299554+003	40	1.65566261878044350847+003
40	1.5757022433557854423+003	40	1.5756515222156283085+003	41	1.73786345866323537536+003
41	1.6557011568574693784+003	41	1.65565097570057159503+003	42	1.82166423844569126333+003
42	1.7377001411044844971+003	42	1.7376594670851184587+003	43	1.9076649648729863162+003
43	1.821659209435735524+003	43	1.821654670851184587+003	44	1.99566564167503856097+003
44	1.907665357644603970+003	44	1.9076599298771598648+003	45	2.08566627360829077734+003
45	1.995657519987727452+003	45	1.99565534859140487+003	46	2.17736686457046640376+003
46	2.0856667546524522993+003	46	2.08565913645071978772+003	47	2.27166741804484890820+003
47	2.176865346707718845+003	47	2.176874886117054634+003	48	2.26566888310542536046+003
48	2.26565474047531537161+003	48	2.26565853988386966+003	49	2.366766931477224314168+003
49	2.366766931477224314168+003	49	2.366766931477224314168+003	50	
50		50		51	

PROBATE EIGENVALUES M = 5.80

M = 0			M = 1			M = 2		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	5.00617010894044791081+000	1	6.12804926667991529180+000	2	9.46326722723929558254+000	2	9.46326722723929558254+000	2
1	1.53855668136753229319+001	2	1.691693897794111810094+001	3	2.11651719386725137708+001	3	2.11651719386725137708+001	3
2	2.4312553027861606598+001	3	2.6973902546716727304+001	4	3.2666974591748101422+001	4	3.2666974591748101422+001	4
3	3.17416453521421472+001	4	3.6676939716257344921+001	5	4.4563743802760033641+001	5	4.4563743802760033641+001	5
4	3.92316253202463004577+001	5	4.71773490746023249+001	6	5.7510614799914006692+001	6	5.7510614799914006692+001	6
5	4.836783708877101644+001	6	5.92177054769759471906+001	7	7.1984777913313372373+001	7	7.1984777913313372373+001	7
6	5.8526259271724608094+001	7	7.3160590789171413070+001	8	8.840999980258159495+001	8	8.840999980258159495+001	8
7	7.3566112539357582183+001	8	7.91064080529531056392+001	9	1.06393103686210468794+002	9	1.06393103686210468794+002	9
8	8.9391817736563148669+001	9	1.070314355016510428+002	10	1.2549088312965807743+002	10	1.2549088312965807743+002	10
9	1.07222870413133415659+002	10	1.270311609116527029+002	11	1.48557691448526233130+002	11	1.48557691448526233130+002	11
10	1.27186330445411306835+002	11	1.4868210556114731746+002	12	1.72605232330431867+002	12	1.72605232330431867+002	12
11	1.49125358317500012793+002	12	1.7295353476362045015+002	13	1.98641044525613687158+002	13	1.98641044525613687158+002	13
12	1.73077571848811379753+002	13	1.989403153744799453+002	14	2.266682083262334505297+002	14	2.266682083262334505297+002	14
13	1.99040224982663154664+002	14	2.26924858174116633190+002	15	2.56689485062838905583+002	15	2.56689485062838905583+002	15
14	2.270115693725428065+002	15	2.569121565556272343+002	16	2.86706486631047193493+002	16	2.86706486631047193493+002	16
15	2.56986445887354339300+002	16	2.88901604405518047892+002	17	3.23720303222209374054+002	17	3.23720303222209374054+002	17
16	2.8696667072952581115+002	17	3.228927480059475505+002	18	3.56731884964494379065+002	18	3.56731884964494379065+002	18
17	3.229502600799680838+002	18	3.58885247565842190642+002	19	3.96741205529086421784+002	19	3.96741205529086421784+002	19
18	3.589365311921151054+002	19	3.9687884218841724849+002	20	4.36749233073792982495+002	20	4.36749233073792982495+002	20
19	3.962472603572411887+002	20	4.3687329667903871012+002	21	4.7875674533715984799+002	21	4.7875674533715984799+002	21
20	4.369147611875842850+002	21	4.788645522069932808+002	22	5.2276195540137462158+002	22	5.2276195540137462158+002	22
21	4.789069368457144895+002	22	5.22864387688057952474+002	23	5.68767049520457559492+002	23	5.68767049520457559492+002	23
22	5.2288857303543988663+002	23	5.6886073303978077458+002	24	6.16771492759739678067+002	24	6.16771492759739678067+002	24
23	5.688919655204692945+002	24	6.1685751043419085895+002	25	6.6675392618934035342+002	25	6.6675392618934035342+002	25
24	6.1688616732323593650+002	25	6.6684654513280498307+002	26	7.18778835100035469372+002	26	7.18778835100035469372+002	26
25	6.668810779513251088+002	26	7.188421116829519640+002	27	7.72781889701884855743+002	27	7.72781889701884855743+002	27
26	7.18876533364469220+002	27	7.7284141347158149188+002	28	8.2878461310440491688+002	28	8.2878461310440491688+002	28
27	7.728764899299448829+002	28	8.2884779643709941033+002	29	8.86787051922728690407+002	29	8.86787051922728690407+002	29
28	8.2886855233165476360+002	29	8.8684595722811755702+002	30	9.46789244791392759728+002	30	9.46789244791392759728+002	30
29	8.86865517338701847+002	30	9.468429445793610475+002	31	1.00879122395927664754+003	31	1.00879122395927664754+003	31
30	9.4686245240157606930+002	31	1.0088427859799655358+003	32	1.07279301652285451708+003	32	1.07279301652285451708+003	32
31	1.008859740837416745+003	32	1.07284141347158149188+003	33	1.1387946453569149899+003	33	1.1387946453569149899+003	33
32	1.0728575464080096934+003	33	1.13884016110277095073+003	34	1.20679613003278115333+003	34	1.20679613003278115333+003	34
33	1.13888523353345754205+003	34	1.2068290152771328584+003	35	1.2767974871004586289+003	35	1.2767974871004586289+003	35
34	1.20685321079224879891+003	35	1.276877962649256817+003	36	1.348797308901277783+003	36	1.348797308901277783+003	36
35	1.2768545702257412430+003	36	1.34882699790436871672+003	37	1.42279987374121035345+003	37	1.42279987374121035345+003	37
36	1.3488475386775616449+003	37	1.42282610735715886225+003	38	1.498809263484650117+003	38	1.498809263484650117+003	38
37	1.42284818549286713291+003	38	1.49883528490724482565+003	39	1.57680189801997232025+003	39	1.57680189801997232025+003	39
38	1.4988467379571249960+003	39	1.5768345217943632159+003	40	1.6568027968815758963+003	40	1.6568027968815758963+003	40
39	1.5768423592454443002+003	40	1.6568338110755295225+003	41	1.7388036300438037917+003	41	1.7388036300438037917+003	41
40	1.65684415863718351612+003	41	1.7388331650968943108+003	42	1.822804003838530087+003	42	1.822804003838530087+003	42
41	1.7388430679446008565+003	42	1.822825546033190446+003	43	1.90880312382657631656+003	43	1.90880312382657631656+003	43
42	1.82284355429509222+003	43	1.9088198381406369917+003	44	2.0668079481872782037+003	44	2.0668079481872782037+003	44
43	1.9088405272074341448+003	44	1.99682145291135994011+003	45	2.178800069610956860+003	45	2.178800069610956860+003	45
44	1.99684000570255117305+003	45	2.0668095646871248487+003	46	2.27280755334953847192+003	46	2.27280755334953847192+003	46
45	2.0668233492827142288+003	46	2.178830496238719872+003	47	2.466805526008458015+003	47	2.466805526008458015+003	47
46	2.178832199349160672+003	47	2.27282355857744759+003	48	2.6668008670164089384+003	48	2.6668008670164089384+003	48
47	2.27282355857744759+003	48	2.4668266386644843602+003	49	2.66680943421502870140+003	49	2.66680943421502870140+003	49
48	2.4668266386644843602+003	49	2.6668266386644843602+003	50		50		50
49	2.6668266386644843602+003							

PROLATE EIGENVALUES $M = 6.00$

$M = 0$			$M = 1$			$M = 2$		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	5.20826915983177328561+000	1	6.32495384650926035351+000	2	9.64609562251007215807+000	2	9.64609562251007215807+000	2
1	1.60004427533821603612+001	2	1.74052193562823202081+001	3	2.16901605133369150053+001	3	2.16901605133369150053+001	3
2	2.555647641367524850+001	3	2.78211122444252118765+001	4	3.346771993727875601456+001	4	3.346771993727875601456+001	4
3	3.32041954907645723318+001	4	3.7816841517083036086+001	5	4.55513433705637937487+001	5	4.55513433705637937487+001	5
4	4.07201942666386386020+001	5	4.8415319725348160878+001	6	5.1860006794085444919+001	6	5.1860006794085444919+001	6
5	4.97737121253562460742+001	6	6.04714440539888330597+001	7	7.3122277830420041952+001	7	7.3122277830420041952+001	7
6	6.1180756895331038996+001	7	7.4405450042746470449+001	8	8.9400507010924757955+001	8	8.9400507010924757955+001	8
7	7.4852664529040598877+001	8	8.0333888729252244734+001	9	1.0756247213836840028+002	9	1.0756247213836840028+002	9
8	9.0851155365165447115+001	9	1.0827452596257131095+002	10	1.27665659230164691508+002	10	1.27665659230164691508+002	10
9	1.0831544534655718543+002	10	1.28226738689713784818+002	11	1.407352500594534480+002	11	1.407352500594534480+002	11
10	1.2841687990826029347+002	11	1.501979633464926650754+002	12	1.737842814560100488+002	12	1.737842814560100488+002	12
11	1.50347443467224702957+002	12	1.7416568640907939654+002	13	1.998210293444456165+002	13	1.998210293444456165+002	13
12	1.740320290653403972+002	13	2.0014300010306127636+002	14	2.2784869744122271291+002	14	2.2784869744122271291+002	14
13	2.002513132902111343+002	14	2.2812460413575371063+002	15	2.5787025944696991455+002	15	2.5787025944696991455+002	15
14	2.281665342486720228+002	15	2.5810549369253319751+002	16	2.898871591334859620+002	16	2.898871591334859620+002	16
15	2.581665433385541716+002	16	2.890949361992983231+002	17	3.2390110774326440713+002	17	3.2390110774326440713+002	17
16	2.9016621830318413671+002	17	3.240844104510115750+002	18	3.5991272595371786995+002	18	3.5991272595371786995+002	18
17	3.241461010424239326+002	18	3.5806983955452033099+002	19	3.97922332934477271+002	19	3.97922332934477271+002	19
18	3.60332445692168232027+002	19	3.707749763315371999+002	20	4.3793023937661402903+002	20	4.3793023937661402903+002	20
19	3.981511815014510626+002	20	4.39067332519751366262+002	21	4.7993704875399267195+002	21	4.7993704875399267195+002	21
20	4.38107710043615127959+002	21	4.800576565830440992+002	22	5.239428918999138887+002	22	5.239428918999138887+002	22
21	4.800978899070745336+002	22	5.2405270748331893128+002	23	5.6994794505028493950+002	23	5.6994794505028493950+002	23
22	5.240853177777774618+002	23	5.7004836643965182916+002	24	6.1795214651766043487+002	24	6.1795214651766043487+002	24
23	5.7006164561747626520+002	24	6.18044538409845345016+002	25	6.679520501906169031+002	25	6.679520501906169031+002	25
24	6.1807527173793382543+002	25	6.68041445481733509+002	26	7.19959607215826218893+002	26	7.19959607215826218893+002	26
25	6.68064628632665301+002	26	7.2003823561596111578+002	27	7.7394623083221863338+002	27	7.7394623083221863338+002	27
26	7.20064300463222929254+002	27	7.2403542509219206360+002	28	8.2996530055416202142+002	28	8.2996530055416202142+002	28
27	7.7455664460879747194+002	28	8.3003200508935173386+002	29	8.87967713342834865072+002	29	8.87967713342834865072+002	29
28	8.3055564220794140296+002	29	8.8803001670039291548+002	30	9.4796987317522567302+002	30	9.4796987317522567302+002	30
29	8.8805185462514951230+002	30	9.4802884187793662194+002	31	1.00997182121527525492+003	31	1.00997182121527525492+003	31
30	9.4806455158143663301+002	31	1.01002705059703136445+003	32	1.0739358451914910388+003	32	1.0739358451914910388+003	32
31	1.0104544127136505960+003	32	1.0740254208210711964+003	33	1.139971859122886772+003	33	1.139971859122886772+003	33
32	1.07404270031556095365+003	33	1.14002393274824833183+003	34	1.207976447766302470+003	34	1.207976447766302470+003	34
33	1.1400401836312976786+003	34	1.2080257222020285181+003	35	1.279797765995614737+003	35	1.279797765995614737+003	35
34	1.2080278209471703+003	35	1.2780213253068246410+003	36	1.3499791987612091042+003	36	1.3499791987612091042+003	36
35	1.2780357249466759412+003	36	1.3500201779280043088+003	37	1.42398632012214198318+003	37	1.42398632012214198318+003	37
36	1.3500336180046874886+003	37	1.42401312058587652348+003	38	1.499981352943327079+003	38	1.499981352943327079+003	38
37	1.424022043109488505+003	38	1.50001814414404087619+003	39	1.57798230584325611402+003	39	1.57798230584325611402+003	39
38	1.5000204080946572394+003	39	1.5780172404819224272+003	40	1.6579871076982116999+003	40	1.6579871076982116999+003	40
39	1.5780288558291554239+003	40	1.5801640263021824330+003	41	1.73998407614650144+003	41	1.73998407614650144+003	41
40	1.6580274747398819164+003	41	1.74001562433346144690+003	42	1.823984761860546689+003	42	1.823984761860546689+003	42
41	1.7400261471701054653+003	42	1.7400149000847150328+003	43	1.90998546109721446765+003	43	1.90998546109721446765+003	43
42	1.82402454630147608565+003	43	1.82401422499242645289+003	44	1.997986142278139941+003	44	1.997986142278139941+003	44
43	1.910023611085823047+003	44	1.9280135947824620642+003	45	2.0879867375511330578+003	45	2.0879867375511330578+003	45
44	1.9980227166617580734+003	45	2.0880130053723935872+003	46	2.179987310894065522+003	46	2.179987310894065522+003	46
45	2.08802171436802338+003	46	2.1800124525839996562+003	47	2.273987847300543687+003	47	2.273987847300543687+003	47
46	2.1800206450210467056+003	47	2.27401193604376737934+003	48	2.3699883509455536292+003	48	2.3699883509455536292+003	48
47	2.2740195555734281462+003	48	2.3700114501207598515+003	49	2.46798882345493315520+003	49	2.46798882345493315520+003	49
48	2.3700151199096452938+003	49	2.468010932545594827+003	50	2.567989267468399920+003	50	2.567989267468399920+003	50
49	2.46801823244141522992+003	50	2.56801056217565238063+003	51	2.6699896858095394198+003	51	2.6699896858095394198+003	51

PROLATE EIGENVALUES M = 6.20

M = 0

EIGENVALUE

L

5.41017015756194240731.000	1
1.66135640750411992562.001	2
2.64002353990213374784.001	3
3.46141465865417677087.001	4
4.225929257119603213.001	5
5.124366096397386223.001	6
6.2565745668375157247.001	7
7.61885453060256352290.001	8
9.195870284033131019367.001	9
1.0980466808831102390.002	10
1.29694822142537324259.002	11
1.5161776551966462188.002	12
1.7555204008880510298.002	13
2.01502869348931597818.002	14
2.2946531107018229373.002	15
2.5943451381873728470.002	16
2.9140502788265469827.002	17
3.2538785563627686770.002	18
3.61330059719048019747.002	19
3.993549524776880400.002	20
4.3934202050915946163.002	21
4.81330861576949249047.002	22
5.2532115518963443229.002	23
5.71312726679261898143.002	24
6.1930280314977346281.002	25
6.6929865725189948328.002	26
7.2122684892040806475.002	27
7.75287629947121050264.002	28
8.31232952308969243574.002	29
8.86277455758135345.002	30
9.49274464616003437962.002	31
1.0112715033794090837.003	32
1.0752683731594131182.003	33
1.1412552056279144.003	34
1.2092625181227693775.003	35
1.2792605302782396662.003	36
1.3512581358484985325.003	37
1.4252631203427662411.003	38
1.5012444998219739705.003	39
1.5792527207336336419.003	40
1.659251126414834384.003	41
1.7412494252545681338.003	42
1.82524826214755774609.003	43
1.91124657603368540946.003	44
1.999247570877216515.003	45
2.0892465393226661704.003	46
2.1812436037824158063.003	47
2.2754241935012833851.003	48
2.3712416925655408317.003	49
2.46924062669238269123.003	50

M = 1

EIGENVALUE

L

4.5213558105449010865.000	1
1.807681338269295354621.001	2
2.67462841020945332535.001	3
3.698459231666271280135.001	4
4.89944027243636748115.001	5
6.17723208833935865088.001	6
7.569777163767401254310.001	7
9.161374898484926257.001	8
1.05544763153145604471.002	9
1.29490773547321244306.002	10
1.51448339283253140955.002	11
1.7541515246638333915.002	12
2.01382416158359116361.002	13
2.2936472702706194960.002	14
2.593491715073548127.002	15
2.91334128516135169907.002	16
3.25321723063338931308.002	17
3.61311220181199788265.002	18
3.9930225309600637160.002	19
4.392943849359792251.002	20
4.812878545774574519.002	21
5.2528202764481501148.002	22
5.712761656655733416.002	23
6.1927210562647291267.002	24
6.6926841714717531846.002	25
7.21264661580187567385.002	26
7.752616830277783439.002	27
8.312583019338934527.002	28
8.86255359533764255507.002	29
9.492535593521943698.002	30
1.0112518273064246672.003	31
1.0752490533009333747.003	32
1.141248155339490674.003	33
1.20924655835413947346.003	34
1.27924508988072032.02.003	35
1.3512437373903336677.003	36
1.42524249550709388656.003	37
1.5012434657367223903.003	38
1.5792428330509765980.003	39
1.65924192974514112136.003	40
1.7412403816844783393.003	41
1.82523752552217736648.003	42
1.91123673523398310893.003	43
1.9992359936444841170.003	44
2.08923530024969795762.003	45
2.1812346509002019847.003	46
2.2752340420873125404.003	47
2.3712347037498186631.003	48
2.4692329328340319254.003	49
2.56923226851683316.003	50

M = 2

EIGENVALUE

L

9.83019250917978834919.000	1
2.22210241749810708717.001	2
3.4281187484963748084.001	3
4.65649066963750196902.001	4
5.9724227792975561128.001	5
7.42992716891847067748.001	6
9.06010032224363598863.001	7
1.08774326392361069594.002	8
1.28842596797011053876.002	9
1.5095485952173335746.002	10
1.750056155312129551921.002	11
2.0101271934550046664.002	12
2.2907072426550504249.002	13
2.5902420215390878167.002	14
2.9109596393247212267.002	15
3.25123444703479205489.002	16
3.6113478503576575408.002	17
3.99144197356750367298.002	18
4.391210132258407478.002	19
4.8115807403591052071.002	20
5.25164549258153860000.002	21
5.71195509705325741695.002	22
6.1917381554992311248.002	23
6.6917758794461850158.002	24
7.211090931221862298.002	25
7.751538507353786743.002	26
8.3118667643656448531.002	27
8.891880688273544867.002	28
9.49190906784591298587.002	29
1.01119279923409591638.003	30
1.07519451093620158301.003	31
1.14119608440030913896.003	32
1.20919747871200652480.003	33
1.27919877014330305591.003	34
1.35119795863901660733.003	35
1.42520103820734199639.003	36
1.5012020372356698779.003	37
1.57920295874761473761.003	38
1.65920381061353699272.003	39
1.74120459972384553678.003	40
1.8251533213278773857.003	41
1.9112060117755973379.003	42
1.99920664757867491988.003	43
2.08920723952377021014.003	44
2.1812077973854809163.003	45
2.27520831524684772159.003	46
2.3712087592187515533.003	47
2.46920925152967304234.003	48
2.56920967576675250801.003	49
2.6712100827921838930.003	50

PROBATE EIGENVALUES M = 6.40

M = 0

EIGENVALUE

L

5.611495867901272035322+000	1
1.72242350668347372586+001	2
2.7443136678790646165+001	3
3.60430924955077955869+001	4
4.38524105040587408330+001	5
5.2774678354602404296+001	6
6.4008222187675757557+001	7
7.7577164429994948186+001	8
9.3312784786024914809+001	9
1.1114036510215892708+002	10
1.31216314375815287682+002	11
1.5292466525091303009+002	12
1.76849270737063328886+002	13
2.02805106035151439+002	14
2.3075728883162252474+002	15
2.6072216971657185902+002	16
2.92657405068573635976+002	17
3.2666546642284566442+002	18
3.62665403489547155930+002	19
4.006333594902915152+002	20
4.40477601064559860+002	21
4.8240517131458843852+002	22
5.2659423612075840300+002	23
5.72546700774796842+002	24
6.205762647268431604+002	25
6.7056632782954425664+002	26
7.225223550090280666+002	27
7.76593444052151914922+002	28
8.3255106427672969000+002	29
8.905631432596347283+002	30
9.5056202509259866633+002	31
1.0122814028412072200+003	32
1.07627460916273545089+003	33
1.14237339507622911+003	34
1.210264484323522111+003	35
1.2805257512594575285+003	36
1.35233276397103333+003	37
1.426209597434290093+003	38
1.50218882824296704+003	39
1.58051654422891873361+003	40
1.66021554422891873361+003	41
1.7425134615057466988+003	42
1.826215027535917+003	43
1.91231045145565107888+003	44
2.00050505655117916+003	45
2.0905075317251546244+003	46
2.1820664472021025241+003	47
2.276504423117391415+003	48
2.37404423117391415+003	49
2.47000350963542503431+003	50

M = 1

EIGENVALUE

L

6.71809429402541257367+000	1
1.665901050523369959+001	2
2.9681549285117330338+001	3
4.01784914242803670894+001	4
5.10339008735032475249+001	5
6.3110424535611941191+001	6
7.70760820920512191+001	7
9.29404185299769418566+001	8
1.1085974109706912334+002	9
1.3094538136150726446+002	10
1.5274710324389671484+002	11
1.7670034077172266148+002	12
2.02746028176687487+002	13
2.3065139721892194899+002	14
2.6063057606507391337+002	15
2.926132911070843452+002	16
3.26597937108390882+002	17
3.6258521405907318120+002	18
4.0076046553735776180+002	19
4.4067032746553812370+002	20
4.825522274758722966+002	21
5.26524517430072260+002	22
5.72546700774796842+002	23
6.205762647268431604+002	24
6.7056632782954425664+002	25
7.225223550090280666+002	26
7.76593444052151914922+002	27
8.3255106427672969000+002	28
8.905631432596347283+002	29
9.5056202509259866633+002	30
1.0122814028412072200+003	31
1.07627460916273545089+003	32
1.14237339507622911+003	33
1.210264484323522111+003	34
1.2805257512594575285+003	35
1.35233276397103333+003	36
1.426209597434290093+003	37
1.50218882824296704+003	38
1.58051654422891873361+003	39
1.66021554422891873361+003	40
1.7425134615057466988+003	41
1.826215027535917+003	42
1.91231045145565107888+003	43
2.00050505655117916+003	44
2.0905075317251546244+003	45
2.1820664472021025241+003	46
2.276504423117391415+003	47
2.37404423117391415+003	48
2.47000350963542503431+003	49
2.570465450458158214554+003	50

M = 2

EIGENVALUE

L

1.0015437968522094024+001	1
2.27572404506343744124+001	2
3.51144669850950641621+001	3
4.76033594360772624697+001	4
6.082644327894881365+001	5
7.515747680837488828+001	6
9.18433507834504933767+001	7
1.10028254462219742332+002	8
1.30141901538231754780+002	9
1.52216718534659225058+002	10
1.762686853511226243+002	11
2.0306280451377315024+002	12
2.3334437975797884959+002	13
2.6035610863864784017+002	14
2.92373148799814783794+002	15
3.238682309808433610+002	16
3.6239797105095547439+002	17
4.0407187588003583594+002	18
4.4841490079129412237+002	19
4.9421425330370202023+002	20
5.426609689482484906+002	21
5.943178497974600353+002	22
6.48421425330370202023+002	23
7.0439595617785143407+002	24
7.6445819551643873625+002	25
8.32448113776045612+002	26
9.045033341735499433+002	27
9.8045233386614480377+002	28
1.0124541940468743755+003	29
1.076459296736323093+003	30
1.1245731240332268055+003	31
1.18045866200149399479+003	32
1.2424610195267591278+003	33
1.3124610195267591278+003	34
1.3846205300634842678+003	35
1.4646205300634842678+003	36
1.54646337945357504293+003	37
1.630464689524822123+003	38
1.717426543920618679624+003	39
1.80646613471340614889+003	40
1.9246648181877503038+003	41
2.0046736314614783888+003	42
2.0946794462547281010+003	43
2.1846846919287025415+003	44
2.2746846903356759230+003	45
2.3746941999467197183+003	46
2.4746951625430828+003	47
2.574702972247301471+003	48
2.6747063884785760515+003	49
2.7747063884785760515+003	50

PROLATE EIGENVALUES M = 6.60

M = 0

L	EIGENVALUE
0	5.81377662353505220936*000
1	1.78377764821787348384*001
2	2.8484956294502288450*001
3	3.7487610529081460112*001
4	4.5494118005222858736*001
5	5.437954618461521359*001
6	6.35511054977405009876*001
7	7.90184758901504731908*001
8	7.47211853392918657396*001
9	1.125264242779135062*002
10	1.3238272922138040406*002
11	1.542804840740136540*002
12	1.78201916111132638023*002
13	2.0414645827601257608*002
14	2.320919469766558377*002
15	2.620547268616445025*002
16	2.9402010256462671432*002
17	3.27991157724315953480*002
18	3.63971568822895114233*002
19	4.01951404586206039940*002
20	4.41934954706862343132*002
21	4.839282115707416037*002
22	5.279051777863211893*002
23	5.7497761889834528637*002
24	6.218630398507379702*002
25	6.718794298474563382*002
26	7.238751535149083211*002
27	7.7786586975301985520*002
28	8.338554702522872028*002
29	8.91854603241181830045*002
30	9.5184577840634666714*002
31	1.01384540732135170834*003
32	1.07744143479408670055*003
33	1.14382761375812866192*003
34	1.2118145039072898035*003
35	1.28181394641933964888*003
36	1.35381211522268197204*003
37	1.42781043548621576721*003
38	1.5038088059504239178*003
39	1.58180744174602057024*003
40	1.66180610768796927875*003
41	1.7438048649621640067*003
42	1.8278037453942229229*003
43	1.9138026815970168847*003
44	2.00180163717744565887*003
45	2.091800669580744105*003
46	2.1837998041644623746*003
47	2.27779896598879944033*003
48	2.3737982305733829490*003
49	2.4717974578499365446*003
50	2.57179681116715934483*003

M = 1

L	EIGENVALUE
6	6.91512955114846342899*000
7	1.92453275659583605085*001
8	3.0625662119740248514*001
9	4.1395495781738007846*001
10	5.2372566153742322819*001
11	6.45156127189851675025*001
12	7.84261972822456836330*001
13	9.4343339535278949716*001
14	1.12220771213546320252*002
15	1.32147352185225536835*002
16	1.540992399499415416*002
17	1.7804454882335498855*002
18	2.04008235288733129799*002
19	2.31978792766218486049*002
20	2.6195462157042065572*002
21	2.93934568188189597151*002
22	3.2791774783401786564*002
23	3.6390510613786853664*002
24	4.0189135061889561434*002
25	4.418809048699298932*002
26	4.8387185322425502353*002
27	5.27861958642313265710*002
28	5.73857034569111603488*002
29	6.21850933185221554528*002
30	6.7184552436933214027*002
31	7.23840710536118441638*002
32	7.77836407462315619621*002
33	8.33832544766196533861*002
34	8.91829064792324470110*002
35	9.51825918713778165303*002
36	1.01382308523088699159*003
37	1.07782048522385271942*003
38	1.14381810067785872517*003
39	1.211815938193217993*003
40	1.28181394641933964888*003
41	1.35381211522268197204*003
42	1.42781043548621576721*003
43	1.5038088059504239178*003
44	1.58180744174602057024*003
45	1.66180610768796927875*003
46	1.7438048649621640067*003
47	1.8278037453942229229*003
48	1.9138026815970168847*003
49	2.00180163717744565887*003
50	2.091800669580744105*003

M = 2

L	EIGENVALUE
2	1.02017227814128496187*001
3	2.32983394826879161963*001
4	3.5957529163548733002*001
5	4.86655863187201371002*001
6	6.207459026395878180*001
7	7.6771440142042391114*001
8	9.312738419753178864*001
9	1.1324836467696884915*002
10	1.3144378034186127017*002
11	1.53521029574387191237*002
12	1.7757374837802201067*002
13	2.03611883027331368335*002
14	2.31639992143094769266*002
15	2.61661439735565125625*002
16	2.93678197621361333278*002
17	3.27691555364982799154*002
18	3.637023856949754504*002
19	4.01711296558092186513*002
20	4.41718722242142749637*002
21	4.837249789954322566*002
22	5.27730305615942962900*002
23	5.7373487825344987231*002
24	6.21738835306535113300*002
25	6.7174284027551476798*002
26	7.2374530903346037640*002
27	7.77747977950047911595*002
28	8.3375034523087720408*002
29	8.91752455239416314234*002
30	9.51754344403633172762*002
31	1.0137560428630723553*003
32	1.0775757574024530723*003
33	1.14375896411694763825*003
34	1.2117622579487707814*003
35	1.28176137589349750380*003
36	1.35376242732391216176*003
37	1.42776339116738911668*003
38	1.50376427607992983545*003
39	1.581765030390083080*003
40	1.66176584654472491395*003
41	1.74376654378484605962*003
42	1.82776719027089168537*003
43	1.9137677908510387733*003
44	2.0017683480418516185*003
45	2.09176887091883670452*003
46	2.183769357593463335003
47	2.27776981272195961244*003
48	2.37377023906240907461*003
49	2.47177063903635724361*003
50	2.57177101473405263827*003
51	2.67377336811003597330*003

PROLATE EIGENVALUES $M = 6.80$

$M = 0$			$M = 1$			$M = 2$		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	6.01492265426564119690+000	1	7.11242116519237330410+000	2	1.038694951453365045416+001	2	1.038694951453365045416+001	2
1	1.8447481519602472120+001	2	1.9832587376303747788+001	3	2.3843852108593563896+001	3	2.3843852108593563896+001	3
2	2.952351167357495359+001	3	3.1577490250123058670+001	4	3.68412597202756483923+001	4	3.68412597202756483923+001	4
3	3.894277281281600399+001	4	4.26340833620542190106+001	5	4.9750494211684528008+001	5	4.9750494211684528008+001	5
4	4.718171240584446903+001	5	5.3768956570650465575+001	6	6.329914249236693993+001	6	6.329914249236693993+001	6
5	5.60456355608324779184+001	6	6.5957474275341622015+001	7	7.80660774244091421074+001	7	7.80660774244091421074+001	7
6	6.774691871237168165+001	7	7.98634322113738601493+001	8	9.44530878506046346735+001	8	9.44530878506046346735+001	8
7	8.0513532605505174304+001	8	8.57356576561602031597+001	9	1.126636444870262741116+002	9	1.126636444870262741116+002	9
8	9.61774762084344644137+001	9	1.13628298790055734522+002	10	1.12788444460505093363+002	10	1.12788444460505093363+002	10
9	1.1395477387471727304+002	10	1.33543557570325611705+002	11	1.5487998445609554281+002	11	1.5487998445609554281+002	11
10	1.3379744805841283083+002	11	1.55477290584951852454+002	12	1.78921726467664852174+002	12	1.78921726467664852174+002	12
11	1.5564147429959343732+002	12	1.794249398842595846+002	13	2.0495970194453541313+002	13	2.0495970194453541313+002	13
12	1.795926848672252886+002	13	2.05381050546578128480+002	14	2.3298754467888598725+002	14	2.3298754467888598725+002	14
13	2.05524510132995587794+002	14	2.33345040495993301592+002	15	2.6300857918976505546+002	15	2.6300857918976505546+002	15
14	2.3346620868727277558+002	15	2.633212247130700177+002	16	2.9502487104572419809+002	16	2.9502487104572419809+002	16
15	2.634235576728194216696+002	16	2.95298102351696548540+002	17	3.2903775734751892989+002	17	3.2903775734751892989+002	17
16	2.9538626752097455384+002	17	3.2927871145287675761+002	18	3.6504613404410473469+002	18	3.6504613404410473469+002	18
17	3.2935069526751370540+002	18	3.652623000202802640+002	19	4.03056619755043914537+002	19	4.03056619755043914537+002	19
18	3.65332721156566815677+002	19	4.0324235518057937812+002	20	4.43063452847482083298+002	20	4.43063452847482083298+002	20
19	4.0331221501074248637+002	20	4.4324266504125485333+002	21	4.85069550839127801523+002	21	4.85069550839127801523+002	21
20	4.43277558441522893+002	21	4.8522512449630753398+002	22	5.290745486703094355+002	22	5.290745486703094355+002	22
21	4.8527791559857324265+002	22	5.29216765323173961433+002	23	5.75078822976529524378+002	23	5.75078822976529524378+002	23
22	5.2924411775867345401+002	23	5.7520770635082234233+002	24	6.2308250886429348065+002	24	6.2308250886429348065+002	24
23	5.752205561392592574+002	24	6.23201708648353471+002	25	6.730857109288923213428+002	25	6.730857109288923213428+002	25
24	6.2321446213278983705+002	25	6.73195478403968186167+002	26	7.25088511512639381698+002	26	7.25088511512639381698+002	26
25	6.73232073016351869327+002	26	7.2518693235295556870+002	27	7.7509097591261652501+002	27	7.7509097591261652501+002	27
26	7.2522743591430041849+002	27	7.7518494304847597445+002	28	8.3509315654567837819+002	28	8.3509315654567837819+002	28
27	7.75216310515654197679+002	28	8.3518052420263177418+002	29	8.9309095959150035876+002	29	8.9309095959150035876+002	29
28	8.35205645464940249720+002	29	8.931755117317620571+002	30	9.53096828910997203377+002	30	9.53096828910997203377+002	30
29	8.9320265704543440592+002	30	9.531728077614001222+002	31	1.015083847066134070+003	31	1.015083847066134070+003	31
30	9.531962452938752979+002	31	1.03514900357582655766+003	32	1.14510105218234663774+003	32	1.14510105218234663774+003	32
31	1.01519334488511957993+003	32	1.079166130403406805+003	33	1.2831032490005872945+003	33	1.2831032490005872945+003	33
32	1.0791885018574774167+003	33	1.14514388457883480404+003	34	1.42910507997733077860+003	34	1.42910507997733077860+003	34
33	1.14516482965437817141+003	34	1.23316138648993717848+003	35	1.5831046229390677786+003	35	1.5831046229390677786+003	35
34	1.213161110869769768+003	35	1.2831599515676494627+003	36	1.66310730511349334127+003	36	1.66310730511349334127+003	36
35	1.283177105835761611+003	36	1.35515699439212342556+003	37	1.745107935084431738+003	37	1.745107935084431738+003	37
36	1.35517459152137855248+003	37	1.429155054907630523+003	38	1.8291045201294355183+003	38	1.8291045201294355183+003	38
37	1.429171737177391976+003	38	1.5051532628486286097+003	39	1.9151090625521126047+003	39	1.9151090625521126047+003	39
38	1.50516905774397812084+003	39	1.5831510647836241945+003	40	2.0933110037039539453+003	40	2.0933110037039539453+003	40
39	1.5831660136034146702+003	40	1.66315006582636716546+003	41	2.2791108572729983093+003	41	2.2791108572729983093+003	41
40	1.663164220474084246+003	41	1.7451480424589531005+003	42	2.37511126906069822628+003	42	2.37511126906069822628+003	42
41	1.74516221161627603400+003	42	1.8291473142666803693+003	43	2.47311162952902767358+003	43	2.47311162952902767358+003	43
42	1.82916024588196634047+003	43	1.9151460762765723037+003	44	2.573113936108020294610+003	44	2.573113936108020294610+003	44
43	1.9151670183354167923+003	44	2.0031438358013478640+003	45		45		45
44	2.00315670183354167923+003	45	2.0933110037039539453+003	46		46		46
45	2.09331510760971592103+003	46	2.2791473142666803693+003	47		47		47
46	2.2791536121505300811+003	47	2.3751409808617701840+003	48		48		48
47	2.37515221028205602716+003	48	2.4731405041697160791+003	49		49		49
48	2.47315066375151260667+003	49	2.573113936108020294610+003	50		50		50
49	2.57314965747327112112+003	50		51		51		51

PROLATE EIGENVALUES $M = 7.00$

$M = 0$		$M = 1$		$M = 7.00$		$M = 2$	
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
0	6.21625285122050955647+000	1	7.30993703776517175880+000	2	1.05770312441066098197+001	2	2.43934076657382477388+001
1	1.9056677802764925230+001	2	2.04213248993289895603+001	3	2.43934076657382477388+001	3	3.767861697247273380059+001
2	3.05602008607472040613+001	3	3.25360139865054437212+001	4	3.767861697247273380059+001	4	5.08568968671612985048+001
3	4.0405727257800122716+001	4	4.3892371276624690959+001	5	5.08568968671612985048+001	5	6.45556053477395101138+001
4	4.89105849214396599218+001	5	5.2016415334850382604+001	6	6.45556053477395101138+001	6	7.93993259745837179179+001
5	5.7777507691419113523+001	6	6.74461521369642674555+001	7	7.93993259745837179179+001	7	9.5820535897256281184+001
6	6.8701439262110821415+001	7	8.13493732067599618086+001	8	9.5820535897256281184+001	8	1.1405442460592025628+002
7	8.20646370871261625612+001	8	9.72056681151674298980+001	9	1.1405442460592025628+002	9	1.3417608607087913223+002
8	9.76845705175722368231+001	9	1.15082579075479745386+002	10	1.3417608607087913223+002	10	1.56257834074669878656+002
9	1.15343278524892871412+002	10	1.3498549827028155662+002	11	1.56257834074669878656+002	11	1.8031211960025530444+002
10	1.352578772083689646+002	11	1.56909496796129828107+002	12	1.8031211960025530444+002	12	2.06349216636128172745+002
11	1.57127985457569296000+002	12	1.80849457741504536247+002	13	2.06349216636128172745+002	13	2.343772577865525210+002
12	1.8102925433978260867+002	13	2.08801423002576568291+002	14	2.343772577865525210+002	14	2.6439766536898781042+002
13	2.0695231995509433504+002	14	2.34762490557240959946+002	15	2.6439766536898781042+002	15	3.06435324231914638365+002
14	2.3489114181847257367+002	15	2.64730546173476935005+002	16	3.06435324231914638365+002	16	3.30425548387345896581+002
15	2.648416591265952132+002	16	2.9670403819636539026+002	17	3.30425548387345896581+002	17	3.66435324231914638365+002
16	2.96801051056467866416+002	17	3.30881814337016256905+002	18	3.66435324231914638365+002	18	4.0444325534659900525+002
17	3.3076730440333972438+002	18	3.66663007669234187676+002	19	4.0444325534659900525+002	19	4.44449782240665176698+002
18	3.66738949526760645183+002	19	4.0466957440480774034+002	20	4.44449782240665176698+002	20	4.83455220348863334962+002
19	4.04714891800694052992+002	20	4.44633153743494917571+002	21	4.83455220348863334962+002	21	5.304598015256203652+002
20	4.44694302041845080220+002	21	4.86621138456672090556+002	22	5.304598015256203652+002	22	5.76463698703776623679+002
21	4.86676542548540254811+002	22	5.3061077335429916356+002	23	5.76463698703776623679+002	23	6.24467043129877845385+002
22	5.3066116110830545832+002	23	5.7650139821080700947+002	24	6.24467043129877845385+002	24	6.74469935842257390977+002
23	5.7664763047950268655+002	24	6.24593584252623034435+002	25	6.74469935842257390977+002	25	7.26472455675015828450+002
24	6.2463577254330509638+002	25	6.745864690691589970+002	26	7.26472455675015828450+002	26	7.80474664876232387841+002
25	6.74625290091135916416+002	26	7.265800937843535662+002	27	7.80474664876232387841+002	27	8.36476613137298424156+002
26	7.26615978001845072256+002	27	7.80574414386588620223+002	28	8.36476613137298424156+002	28	8.94478340524072943217+002
27	7.8060766803355515008+002	28	8.36569316955892397874+002	29	8.94478340524072943217+002	29	9.54479479638892855579+002
28	8.36600221313413460887+002	29	8.94564724798451257836+002	30	9.54479479638892855579+002	30	1.01648125723570002167+003
29	8.9459522048250619803+002	30	9.54560573419646981662+002	31	1.01648125723570002167+003	31	1.0804824954408770620+003
30	9.5458747334200232451+002	31	1.01655680827342496643+003	32	1.0804824954408770620+003	32	1.14648125723570002167+003
31	1.01658199361480072501+003	32	1.08055339298028287717+003	33	1.14648125723570002167+003	33	1.214484624285913237+003
32	1.08057701323134867028+003	33	1.14655025790592091882+003	34	1.214484624285913237+003	34	1.28448554371183183891+003
33	1.1465724741742803032+003	34	1.21454739901970132968+003	35	1.28448554371183183891+003	35	1.356486338160686807639+003
34	1.2145683243365214810+003	35	1.28454477697183960688+003	36	1.356486338160686807639+003	36	1.43048714756163318069+003
35	1.28456452218943174967+003	36	1.35654236634281176259+003	37	1.43048714756163318069+003	37	1.50648784968001251850+003
36	1.35656102879431545785+003	37	1.4305401450292758725+003	38	1.50648784968001251850+003	38	1.66448908940684888793+003
37	1.4305578112215995106+003	38	1.50653809373890224720+003	39	1.66448908940684888793+003	39	1.7464896381831568750+003
38	1.50655484244161926003	39	1.5845361957262659968+003	40	1.7464896381831568750+003	40	1.83049014626889791610+003
39	1.58455209639669127573+003	40	1.664534356774722421+003	41	1.83049014626889791610+003	41	1.9164906172784917791+003
40	1.66454955155757186926+003	41	1.7465326009566664165+003	42	1.9164906172784917791+003	42	2.00449105488162377694+003
41	1.7465471801009767252+003	42	1.83053127982850450082+003	43	2.00449105488162377694+003	43	2.18644184198308118212+003
42	1.8305449917821205610+003	43	1.91652986201155275320+003	44	2.18644184198308118212+003	44	2.28049219669123636710+003
43	1.9165429431999445977+003	44	2.00452895383714411502+003	45	2.28049219669123636710+003	45	2.37649252850228974525+003
44	2.00454103306901953240+003	45	2.09452730075180376322+003	46	2.37649252850228974525+003	46	2.474428393636075471+003
45	2.0945392471151886514+003	46	2.1865264186895614763+003	47	2.474428393636075471+003	47	2.57449313101829375071+003
46	2.18653757531811127901+003	47	2.28052505518271646098+003	48	2.57449313101829375071+003	48	2.67649340505052411499+003
47	2.2805360084482855161+003	48	2.37652403482443300748+003	49	2.67649340505052411499+003		
48	2.3765345370509520338+003	49	2.47452307550780318372+003	50	2.57452217246249222966+003		
49	2.47453315432762298444+003	50	2.57452217246249222966+003				

PROBLATE EIGENVALUES M = 7.20

M = 0			M = 1			M = 2		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	6.41748072048436654806+000	1	7.50764995990383001749+000	2	1.076589003688562366402+001	2	1.076589003688562366402+001	2
1	1.96650605998900058720+001	2	2.10113238778446573958+001	3	2.49466316122072301408+001	3	2.49466316122072301408+001	3
2	3.15943384431698978335+001	3	3.35003234208927402765+001	4	3.85547933936374894749+001	4	3.85547933936374894749+001	4
3	4.18742129771217899907+001	4	4.51685276340008113320+001	5	5.19836713870201577582+001	5	5.19836713870201577582+001	5
4	5.0676329647695391354+001	5	5.6688274393443976149+001	6	6.5843017114236262511+001	6	6.5843017114236262511+001	6
5	5.9577158100489912239+001	6	6.89806019364640513913+001	7	8.07707878699304746840+001	7	8.07707878699304746840+001	7
6	7.03922934842667587177+001	7	8.280447613363410827544+001	8	9.72298882686047347730+001	8	9.72298882686047347730+001	8
7	8.3671782727668019366+001	8	9.8733965179757371448+001	9	1.15470180157404024939+002	9	1.15470180157404024939+002	9
8	9.9243317883512980336+001	9	1.16584176700367155910+002	10	1.35606929951635974874+002	10	1.35606929951635974874+002	10
9	1.16962694977467363288+002	10	1.3647335307271496970+002	11	1.57690747654045991018+002	11	1.57690747654045991018+002	11
10	1.3676543012908734548+002	11	1.58386845019131803783+002	12	1.81745354339671341925+002	12	1.81745354339671341925+002	12
11	1.5862353198053390689+002	12	1.82318360762886370756+002	13	2.07782710585392763693+002	13	2.07782710585392763693+002	13
12	1.8251015293511507213+002	13	2.08263574214437742833+002	14	2.35809297860255712392+002	14	2.35809297860255712392+002	14
13	2.08424315707597504411+002	14	2.36219174928522683944+002	15	2.65828848564476564740+002	15	2.65828848564476564740+002	15
14	2.365607561372956722+002	15	2.66182749449662729477+002	16	2.9784362343224173006+002	16	2.9784362343224173006+002	16
15	2.66300893559117004224+002	16	2.9815252633929232524+002	17	3.31855051109207185428+002	17	3.31855051109207185428+002	17
16	2.9825560836257621103+002	17	3.32127190219722638045+002	18	3.67864067522457092182+002	18	3.67864067522457092182+002	18
17	3.322179806103195050+002	18	3.68105751621839603687+002	19	4.05871305115208376833+002	19	4.05871305115208376833+002	19
18	3.6818636670043552808+002	19	4.06087456522430736009+002	20	4.45877202922148737264+002	20	4.45877202922148737264+002	20
19	4.0615954215913939003+002	20	4.4607172313151659926+002	21	4.87882073007752990259+002	21	4.87882073007752990259+002	21
20	4.4613659308325123363+002	21	4.88058097271022659314+002	22	5.31886141874220775615+002	22	5.31886141874220775615+002	22
21	4.861167924145503024+002	22	5.3204220497637484836+002	23	5.77889577012407339538+002	23	5.77889577012407339538+002	23
22	5.3209959333602684910+002	23	5.7803580704505559589+002	24	6.25892504361475747314+002	24	6.25892504361475747314+002	24
23	5.7804456190040155952+002	24	6.2626626939487261618+002	25	6.75895020025591514309+002	25	6.75895020025591514309+002	25
24	6.260713433806183652+002	25	6.76018493488260237318+002	26	7.27897198470397162104+002	26	7.27897198470397162104+002	26
25	6.7605555222537064379+002	26	7.28011253907505625071+002	27	7.8189097889798782745+002	27	7.8189097889798782745+002	27
26	7.26049277872210740896+002	27	7.8200478202070931660+002	28	8.3790076448404511628+002	28	8.3790076448404511628+002	28
27	7.82040014692252176914+002	28	8.3798973792685981267+002	29	8.95902235218753434091+002	29	8.95902235218753434091+002	29
28	8.380317136995851579+002	29	8.9599374224955610672+002	30	9.55903539971146927427+002	30	9.55903539971146927427+002	30
29	8.96024246049109990049+002	30	9.55989010987687252064+002	31	1.0179470310217984703+003	31	1.0179470310217984703+003	31
30	9.5601750366392622193+002	31	1.0179847090543234459+003	32	1.08190574463683281332+003	32	1.08190574463683281332+003	32
31	1.0180113957460113407+003	32	1.08198081811373769568+003	33	1.14790668116012240728+003	33	1.14790668116012240728+003	33
32	1.0620058444681693192+003	33	1.1479727243817664591+003	34	1.21590752650434013010+003	34	1.21590752650434013010+003	34
33	1.14800079414283807021+003	34	1.2159740009258223860+003	35	1.28590829228124545976+003	35	1.28590829228124545976+003	35
34	1.215996129425700027+003	35	1.28597101262678374226+003	36	1.3579089889789896799+003	36	1.3579089889789896799+003	36
35	1.285991920042143124+003	36	1.3579682660707700371+003	37	1.43190962288430908168+003	37	1.43190962288430908168+003	37
36	1.3579840268360727023+003	37	1.43196573523454694166+003	38	1.50791020315362839961+003	38	1.50791020315362839961+003	38
37	1.4319844399515494457+003	38	1.50796339813219785970+003	39	1.58591073521031340791+003	39	1.58591073521031340791+003	39
38	1.5079811303877734074+003	39	1.5859612355063197678+003	40	1.66591122431781259646+003	40	1.66591122431781259646+003	40
39	1.58597803990343127670+003	40	1.6659592042880730666+003	41	1.74791167503453664653+003	41	1.74791167503453664653+003	41
40	1.6659752326587359398+003	41	1.7479573679727676120+003	42	1.83191209132479146918+003	42	1.83191209132479146918+003	42
41	1.7479729590246885006+003	42	1.83195563495103650703+003	43	1.91791924766498128411+003	43	1.91791924766498128411+003	43
42	1.8319731499135128267+003	43	1.91795401964108162303+003	44	2.0059131617616476334+003	44	2.0059131617616476334+003	44
43	1.917967867636379913+003	44	2.0059251163198311374+003	45	2.16791337599004056851+003	45	2.16791337599004056851+003	45
44	2.005957372041894784+003	45	2.0959511016342646815+003	46	2.28191403319706568014+003	46	2.28191403319706568014+003	46
45	2.095985746482347624+003	46	2.18794978134156542186+003	47	2.37791403319706568014+003	47	2.37791403319706568014+003	47
46	2.1879618439794425779+003	47	2.28194978134156542186+003	48	2.475914285832822505+003	48	2.475914285832822505+003	48
47	2.281960136336018646+003	48	2.3779473808457521215+003	49	2.57591452151145969252+003	49	2.57591452151145969252+003	49
48	2.377944496026704827+003	49	2.4759462879299998983+003	50	2.67791474319847341162+003	50	2.67791474319847341162+003	50
49	2.47595669594694489032+003	50	2.5759462879299998983+003					

PROBATE EIGENVALUES M = 7.40

M = 0

EIGENVALUE

L

EIGENVALUE

M = 1

L

M = 2

EIGENVALUE

1	6.618617953/5921183010+000	1	7.7055369143442222156+000	2	1.09554575789962772546+001
2	2.02727219409360710020+001	2	2.16024022225848430445+001	3	2.5501930436960923682+001
3	5.26259237849630673409+001	3	3.4469013347866235709+001	4	3.94403256131763341024+001
4	4.33453617648201515548+001	4	4.646078335987156874605+001	5	5.31266687982948319923+001
5	5.247442258007470521+001	5	5.81687668044941381253+001	6	6.71604078546360915476+001
6	6.14335113066110845621+001	6	7.0560127668384233818+001	7	8.21799978246583296340+001
7	7.2148913081166101243+001	7	8.44689327136003393169+001	8	9.86804865499530452823+001
8	8.7336643071189036209+001	8	1.00291267527396291894+002	9	1.16937994597143677380+002
9	1.0054522402410532367+002	9	1.18133464889633892145+002	10	1.37081167008181620809+002
10	1.1654055640067036204+002	10	1.3800801965001837543+002	11	1.5916695239534470506+002
11	1.3832033989430695360+002	11	1.59909646058856573712+002	12	1.83221634479870024120+002
12	1.5013492594166272594+002	12	1.83833914987729763933+002	13	2.09258271605152392310+002
13	1.640362527454661190+002	13	2.09769733883431393149+002	14	2.372838350036896776+002
14	2.0944074130370370041+002	14	2.37719346945908105492+002	15	2.67302282979847130229+002
15	2.478644313393035114645+002	15	2.67678013483753994447+002	16	2.993159772885671827+002
16	2.6703355115217925053+002	16	2.99643721429340014993+002	17	3.3326391608336928291+002
17	2.9975399228487539227+002	17	3.33614976767586431119+002	18	3.693344782922226295815+002
18	3.33711294474501311101+002	18	3.69590655781256191638+002	19	4.07340872572086832914+002
19	3.667613903540761500+002	19	4.0756902262545125073+002	20	4.47346009855939950736+002
20	4.0764628859322645123+002	20	4.47550556689858011604+002	21	4.893501958166339259226+002
21	4.4762076879210683944+002	21	4.8953660041425026867+002	22	5.3335364949218761271+002
22	4.895987542551761418+002	22	5.3352129634074991542+002	23	5.79356531541386644237+002
23	5.3357946401348425599+002	23	5.7951131699596413145+002	24	6.27359963566961622219+002
24	5.795622780401518242+002	24	6.2750907513183171938+002	25	6.77301026609017541942+002
25	6.2748233138660286956+002	25	6.77491683334557034798+002	26	7.29332798469178812277+002
26	6.77552433376191419+002	26	7.2948347306720473797+002	27	7.83364329486342631013+002
27	7.2952370410001244582+002	27	7.83476133806860932401+002	28	8.3935661396136196278+002
28	7.83513406847884613117+002	28	8.39469546945159126071+002	29	8.97366827664610372225+002
29	8.39504179303257669407+002	29	8.97461361312622186208+002	30	9.5737854545279129457+002
30	8.97495741318626082+002	30	9.5750249111399805928+002	31	1.0193687635920465269+003
31	9.574863812840593939+002	31	1.019452338642088108275+003	32	1.08336957228563275978+003
32	1.01944151324366409219+003	32	1.08344895864490424117+003	33	1.1493702998133336676+003
33	1.0834742289070699032+003	33	1.14944492102212343994+003	34	1.21737094355466109009+003
34	1.0834979701105903303+003	34	1.2174422739873983770+003	35	1.28737152789630733501+003
35	1.0835174646564162507719+003	35	1.2874378398344296686+003	36	1.35937205629703969838+003
36	1.083545616416171908+003	36	1.35943472547130191908+003	37	1.4337253574789055946+003
37	1.08357451629416171908+003	37	1.43343185573936053620+003	38	1.5093729721770720414+003
38	1.08360341629416171908+003	38	1.50942920570318766447+003	39	1.58737337063812027114+003
39	1.08363231629416171908+003	39	1.5874267353215536225+003	40	1.66737373546031597935+003
40	1.08366121629416171908+003	40	1.6674247999842496520+003	41	1.74937407036990543868+003
41	1.08369011629416171908+003	41	1.7494236820808167094+003	42	1.83337437858826753900+003
42	1.08371901629416171908+003	42	1.83342040318071163812+003	43	1.91937466291197070875+003
43	1.08374791629416171908+003	43	1.91941857163759917877+003	44	2.0073749257780689351+003
44	1.08377681629416171908+003	44	2.00741686176717361154+003	45	2.09737516931989529921+003
45	1.08380571629416171908+003	45	2.09741526303487628649+003	46	2.18937539540851040495+003
46	1.08383461629416171908+003	46	2.18941326602113691891+003	47	2.2833756056934058112+003
47	1.08386351629416171908+003	47	2.2834123622828211622+003	48	2.37937580163203451822+003
48	1.08389241629416171908+003	48	2.3794110423434086213+003	49	2.47737598451637940009+003
49	1.08392131629416171908+003	49	2.47740980504527009330+003	50	2.57737615549508446987+003
50	1.08395021629416171908+003	50	2.57740863855199411084+003	51	2.679376315592202866923+003

PRBLATE EIGENVALUES M = 7.60

M = 0			M = 1			M = 2		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	6.81967453638873841470+000	1	7.90357830266236977399+000	2	1.11456709047800711260+001	2	1.11456709047800711260+001	2
1	2.08797440488390213782+001	2	2.21944067806788096449+001	3	2.60627921751472972420+001	3	2.60627921751472972420+001	3
2	3.36550378233549345005+001	3	3.54433176738673927577+001	4	4.03344614523992367289+001	4	4.03344614523992367289+001	4
3	4.48172316033768702173+001	4	4.767457548518307640+001	5	5.42937559927800165474+001	5	5.42937559927800165474+001	5
4	5.430022866100233167+001	5	5.96995837315116405409+001	6	6.85067538294179363575+001	6	6.85067538294179363575+001	6
5	6.33536530218293846791+001	6	7.21844365081829742293+001	7	8.36264210416105987273+001	7	8.36264210416105987273+001	7
6	7.3972606179838257250+001	7	8.161028577420039338713+001	8	1.00172829771836358669+002	8	1.00172829771836358669+002	8
7	8.70605722727525747573+001	8	1.01907997215548304987+002	9	1.18449005506827548774+002	9	1.18449005506827548774+002	9
8	1.02519037338739493261+002	9	1.19730874470515107733+002	10	1.3859899840n181010508+002	10	1.3859899840n181010508+002	10
9	1.20168543103545634122+002	10	1.39589342093667954605+002	11	1.6068666349437505009+002	11	1.6068666349437505009+002	11
10	1.39923655741142218252+002	11	1.61478220215382492733+002	12	1.84741167243523378676+002	12	1.84741167243523378676+002	12
11	1.61744064040501913977+002	12	1.85390394211481064101+002	13	2.1077679150739754117+002	13	2.1077679150739754117+002	13
12	1.85607851803628274814+002	13	2.11320137991113583793+002	14	2.3880104536502722871+002	14	2.3880104536502722871+002	14
13	2.1150184859224047876+002	14	2.3926321183058655704+002	15	2.688181267327373733292+002	15	2.688181267327373733292+002	15
14	2.39417624927379607514+002	15	2.69215518268775988668+002	16	3.0083050568749251149+002	16	3.0083050568749251149+002	16
15	2.69349540398752189600+002	16	3.01177782561444036033+002	17	3.3483969937065407679+002	17	3.3483969937065407679+002	17
16	3.01293688424296625153+002	17	3.35145315591294922885+002	18	3.70846674022782098738+002	18	3.70846674022782098738+002	18
17	3.3524728661253716960+002	18	3.71117846991795588912+002	19	4.08852064832456040901+002	19	4.08852064832456040901+002	19
18	3.71208306510247255643+002	19	4.09094408925735938944+002	20	4.48856330666068294057+002	20	4.48856330666068294057+002	20
19	4.0917523882403597617+002	20	4.4907425821832790484+002	21	4.90859678186837085561+002	21	4.90859678186837085561+002	21
20	4.4914654156906712074+002	21	4.9105680207246505104+002	22	5.3482406988669739647+002	22	5.3482406988669739647+002	22
21	4.9112255759152664114+002	22	5.35041590731640387908+002	23	5.80864637982190595013+002	23	5.80864637982190595013+002	23
22	5.35101337942321312631+002	23	5.8102254535809428665+002	24	6.2886648169240934227+002	24	6.2886648169240934227+002	24
23	5.81082808019460472444+002	24	6.29016498559918351360+002	25	6.7886802324098765934+002	25	6.7886802324098765934+002	25
24	6.29066515421701628933+002	25	6.7900808347495379002+002	26	7.30869315881917737648+002	26	7.30869315881917737648+002	26
25	6.7905211325944446011+002	26	7.309988134480404800+002	27	7.84870451737472986700+002	27	7.84870451737472986700+002	27
26	7.31039119462461502251+002	27	7.84984527011374354560+002	28	8.40871356510959853458+002	28	8.40871356510959853458+002	28
27	7.85027902876747320000+002	28	8.40981090123401482191+002	29	8.9887216681973748774+002	29	8.9887216681973748774+002	29
28	8.4101762355137098346+002	29	8.98973390754338493407+002	30	9.58872869252362839729+002	30	9.58872869252362839729+002	30
29	8.99008468912338573290+002	30	9.58968334710114082740+002	31	1.02087348180508463855+003	31	1.02087348180508463855+003	31
30	9.990001593686064447+002	31	1.02096284233645270285+003	32	1.08487401893980669338+003	32	1.08487401893980669338+003	32
31	1.02099263151942969325+003	32	1.08495784591242827104+003	33	1.1508744937217412058+003	33	1.1508744937217412058+003	33
32	1.06498579015493603720+003	33	1.15093328757199949283+003	34	1.2188749116647933924+003	34	1.2188749116647933924+003	34
33	1.1509795542380970408+003	34	1.15093328757199949283+003	35	1.268752846779131924+003	35	1.268752846779131924+003	35
34	1.21697385452809707862+003	35	1.2889452932584620147+003	36	1.3608756179156300686+003	36	1.3608756179156300686+003	36
35	1.26896830571353541606+003	36	1.36094177733914502900+003	37	1.43487591679340239598+003	37	1.43487591679340239598+003	37
36	1.36096383142400466076+003	37	1.43493853761662004660+003	38	1.51087618584634552146+003	38	1.51087618584634552146+003	38
37	1.43495941202392791176+003	38	1.51093554593499151023+003	39	1.5887642889388292654+003	39	1.5887642889388292654+003	39
38	1.510953331175443126+003	39	1.58893277763261845243+003	40	1.66887664916918645952+003	40	1.66887664916918645952+003	40
39	1.5669515611222271324+003	40	1.66893021103499012345+003	41	1.75087684942293094024+003	41	1.75087684942293094024+003	41
40	1.6689450654894600780+003	41	1.75092782703132513657+003	42	1.83487703200610625785+003	42	1.83487703200610625785+003	42
41	1.75094431949757975932+003	42	1.8349256681948681605+003	43	1.92087719893710913927+003	43	1.92087719893710913927+003	43
42	1.83494180132925864708+003	43	1.92093354110691653084+003	44	2.00887735195609973189+003	44	2.00887735195609973189+003	44
43	1.92093898801961449379+003	44	2.0089216108577193582+003	45	2.09887749256938178336+003	45	2.09887749256938178336+003	45
44	2.0089336640594128155+003	45	2.09891980607794706815+003	46	2.19087762208581409904+003	46	2.19087762208581409904+003	46
45	2.09893391012624004089+003	46	2.1909181161326357592+003	47	2.26447774164683340866+003	47	2.26447774164683340866+003	47
46	2.1909316146526451314+003	47	2.28491655314893139217+003	48	2.38087785225132758035+003	48	2.38087785225132758035+003	48
47	2.2849294616273384095+003	48	2.38091504358379463142+003	49	2.47887795477633628986+003	49	2.47887795477633628986+003	49
48	2.38092744046100996595+003	49	2.4789136447045459450+003	50	2.57887804999435408616+003	50	2.57887804999435408616+003	50
49	2.47892554143432191891+003	50	2.57891232789289977384+003	51	2.6808781385878372725+003	51	2.6808781385878372725+003	51

PROLATE EIGENVALUES H = 7.80

M = 0

EIGENVALUE

L

7.02065906115902999165+000	1
2.1486200137339110787+001	2
3.46618142364801718942+001	3
4.62851940174287455108+001	4
5.6149158354641526460+001	5
6.5331833170900473853+001	6
7.58644532362741200194+001	7
8.89470017015382973844+001	8
1.04237771258151109251+002	9
1.2164718355200129113+002	10
1.415752446656-023143+002	11
1.633761403-4280188847+002	12
1.872252577122329856+002	13
2.1310789666625513166+002	14
2.4101457867354233066+002	15
2.70939393939393939393+002	16
3.026775452-8503990170+002	17
3.368621222780850728+002	18
3.72730928081-310463+002	19
4.1074651587342299004+002	20
4.5071521671564757759+002	21
4.9268822331329124002+002	22
5.3660477838953104853+002	23
5.8264284613219593121+002	24
6.3062626557202217060+002	25
6.8061033547692183874+002	26
7.32596188466311280572+002	27
7.86545562549757405706+002	28
8.4257224844597622338+002	29
9.0056207025922323263+002	30
9.6057288070152250122+002	31
1.02244555166153103+003	32
1.065369894146364391+003	33
1.125300937505224934+003	34
1.22037901505214334+003	35
1.2905180133708149343+003	36
1.3625127061523713059+003	37
1.436507187784114443+003	38
1.512503308231305278+003	39
1.59049913607311215105+003	40
1.670495270456900646+003	41
1.752491681052622162+003	42
1.8364883439999212181+003	43
1.9224852333542879156+003	44
2.010482330510800532+003	45
2.1004796175211976512+003	46
2.1924770717343997726+003	47
2.2864746972373704495+003	48
2.3847246214617793887+003	49
2.48047036240683861951+003	50

M = 1

EIGENVALUE

L

8.1017536085096891993+000	1
2.27872087383313247741+001	2
3.64203971637553252171+001	3
4.9086963833822443323+001	4
6.1259335669571087932+001	5
7.3851957942897672504+001	6
8.7786257463066714569+001	7
1.0357456218296810568+002	8
1.213784262020054940+002	9
1.41217883082391118592+002	10
1.63092896776135873108+002	11
1.86994080033246931087+002	12
2.12941529239426916508+002	13
2.4085086619250366716+002	14
2.709848870900794326+002	15
3.02754873293179914727+002	16
3.36718352257482817020+002	17
3.72687455629416289569+002	18
4.10661093949714502955+002	19
4.50638426917321205891+002	20
4.9261898773977219059+002	21
5.366016921518891222783+002	22
5.8258694701888485090+002	23
6.3057347566118081505+002	24
6.805617627852639688+002	25
7.3251338745720796107+002	26
7.86542020918775413679+002	27
8.42533658513806233669+002	28
9.00526125520693282472+002	29
9.60519315991846324793+002	30
1.02251314033688298381+003	31
1.0850732236973815641+003	32
1.15250239707004074794+003	33
1.22049770850534327388+003	34
1.290493085135198768+003	35
1.36248945536864000251+003	36
1.43648591279149345362+003	37
1.51248244911930039851+003	38
1.5904793661921159188+003	39
1.6704645091787125217+003	40
1.7524737052517693167+003	41
1.8364732764389224160+003	42
1.92246895178827523265+003	43
2.01046678159662278682+003	44
2.10046475246478089292+003	45
2.19246285245536788572+003	46
2.28646107084280598397+003	47
2.38245939799732889199+003	48
2.48045782524800106499+003	49
2.58045634477047194056+003	50

M = 2

EIGENVALUE

L

1.133647487917800602423+001	1
2.6621578436394155658+001	2
4.1236497731774377136+001	3
5.54748184272877286659+001	4
6.98809840043575168107+001	5
8.51094518985696411744+001	6
1.01706570183822547155+002	7
1.20033312856089053106+002	8
1.40160617492287053596+002	9
1.62250096113889525350+002	10
1.86304162995692644698+002	11
2.12338466002021919673+002	12
2.40381106135943676036+002	13
2.703765418142338222461+002	14
3.02387355243284560480+002	15
3.36395107110955546414+002	16
3.7240077529253503425+002	17
4.1040991669848176436+002	18
4.50408175593080362943+002	19
4.92410611337812068094+002	20
5.36412498256020942611+002	21
5.8241397407726131740+002	22
6.30415139583471840809+002	23
6.804160677733359478+002	24
7.32416812558947501904+002	25
7.8641741243434108534+002	26
8.42417903593771635955+002	27
9.00418302978731597798+002	28
9.60418631236910284486+002	29
1.02241890201866950605+003	30
1.08641912626037297736+003	31
1.15241931259978868683+003	32
1.22041959768034674729+003	33
1.29041959768034674729+003	34
1.362419700534930852656+003	35
1.43641979750034319624+003	36
1.51241987405371996829+003	37
1.590419933988996867+003	38
1.67041999250013789092+003	39
1.752420037979225006083+003	40
1.8364200718071041586+003	41
1.92242010822361445621+003	42
2.0104201350426375451+003	43
2.1004201574212755178+003	44
2.19242017601825952138+003	45
2.28642019138924031863+003	46
2.38242020400419725984+003	47
2.48042021426172805708+003	48
2.5804202250074449025+003	49
2.68242022901009278479+003	50

PROLATE EIGENVALUES M = 8.00

M = 0			M = 1			M = 2		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	7.2215789306974682569+000	1	8.30005968009051777546+000	2	1.15278197924068096016+001	2	1.15278197924068096016+001	2
1	2.20921543975673030853+001	2	2.33806997271474520212+001	3	2.71900450773389921660+001	3	2.71900450773389921660+001	3
2	3.570641673114980866+001	3	3.7400740617442408244+001	4	4.21457799109789545535+001	4	4.21457799109789545535+001	4
3	4.77570965931911876254+001	4	5.04178233959225885787+001	5	5.66717669433638439857+001	5	5.66717669433638439857+001	5
4	5.80167704952724916626+001	5	6.28460371618516025071+001	6	7.12819872693858219833+001	6	7.12819872693858219833+001	6
5	6.73647563346596644282+001	6	7.55616956667648204194+001	7	8.6628413529793207752+001	7	8.6628413529793207752+001	7
6	7.74252232921095591925+001	7	8.95191073352587607461+001	8	1.03281509080596245540+002	8	1.03281509080596245540+002	8
7	9.0691430284801727744+001	8	1.05291347635409197269+002	9	1.21600993789326125236+002	9	1.21600993789326125236+002	9
8	1.0601169390575716030+002	9	1.23071811294313047877+002	10	1.41766210875985747841+002	10	1.41766210875985747841+002	10
9	1.25577157716514901485+002	10	1.42894037474191672877+002	11	1.63857466143516838396+002	11	1.63857466143516838396+002	11
10	1.4327579224293135646+002	11	1.6475014031243691341+002	12	1.87910834929252304090+002	12	1.87910834929252304090+002	12
11	1.65055540807043383992+002	12	1.8664326190627232357+002	13	2.13943494543396948993+002	13	2.13943494543396948993+002	13
12	1.84888787960452028062+002	13	2.14554637094296057783+002	14	2.41964200431274679476+002	14	2.41964200431274679476+002	14
13	2.1475915309649357433+002	14	2.42482870197376435167+002	15	2.71977694045953356144+002	15	2.71977694045953356144+002	15
14	2.42656221552782394918+002	15	2.72423995453882862950+002	16	3.03986676177300642436+002	16	3.03986676177300642436+002	16
15	2.7257305073318474054+002	16	3.04375101662387799824+002	17	3.3799275109490108162+002	17	3.3799275109490108162+002	17
16	3.04504843922915691832+002	17	3.38334236301765799915+002	18	3.73996905768053861419+002	18	3.73996905768053861419+002	18
17	3.384468190207050397521+002	18	3.74299615611344148908+002	19	4.11999765698749922080+002	19	4.11999765698749922080+002	19
18	3.74400605432773492029+002	19	4.12270077952168128932+002	20	4.52001737490619127263+002	20	4.52001737490619127263+002	20
19	4.1236024514518659061+002	20	4.52244661158182014612+002	21	4.9400309129492296751+002	21	4.9400309129492296751+002	21
20	4.5232570643095958572+002	21	4.942226700450863330202+002	22	5.38004010033552122498+002	22	5.38004010033552122498+002	22
21	4.9429592191705602552+002	22	5.38203524634214954896+002	23	5.8400461962131683817+002	23	5.8400461962131683817+002	23
22	5.3427005363398343946+002	23	5.84186722709263715334+002	24	6.320050079648802696+002	24	6.320050079648802696+002	24
23	5.842474200856662085+002	24	6.32171912420365871475+002	25	6.82005237294676435651+002	25	6.82005237294676435651+002	25
24	6.3222756124553781098+002	25	6.8215879198817512614+002	26	7.3400535199039033889+002	26	7.3400535199039033889+002	26
25	6.82299876251761511+002	26	7.34147114504812866392+002	27	7.88005384132424721979+002	27	7.88005384132424721979+002	27
26	7.341943720944486712+002	27	7.88136676427465047877+002	28	8.4400535703520632113+002	28	8.4400535703520632113+002	28
27	7.88180447286950845105+002	28	8.44127308779871363544+002	29	9.020052877260569853+002	29	9.020052877260569853+002	29
28	8.4416794766434798696+002	29	9.0211887036026073130+002	30	9.6200518889782231908+002	30	9.6200518889782231908+002	30
29	9.0215673581767512077+002	30	9.6211124523029842278+002	31	1.02400506968788254983+003	31	1.02400506968788254983+003	31
30	9.62146597180880409032+002	31	1.02410432467540182102+003	32	1.0800049370167906468+003	32	1.0800049370167906468+003	32
31	1.0241374125694384777+003	32	1.0809803168541425736+003	33	1.15400479597662629770+003	33	1.15400479597662629770+003	33
32	1.0881290656293776314+003	33	1.1540922905667895467+003	34	1.22200465033957042052+003	34	1.22200465033957042052+003	34
33	1.15412145740971670194+003	34	1.22208703872065902684+003	35	1.29200450289125912124+003	35	1.29200450289125912124+003	35
34	1.22211450316503754916+003	35	1.29208222216547749983+003	36	1.36400435567736856072+003	36	1.36400435567736856072+003	36
35	1.2921081299732550265+003	36	1.36407779415391621365+003	37	1.43800421018667494846+003	37	1.43800421018667494846+003	37
36	1.3641022741264443563+003	37	1.43807371404157123995+003	38	1.51400406740777956223+003	38	1.51400406740777956223+003	38
37	1.43809688298110783566+003	38	1.51406974635651179094+003	39	1.59200392833178362048+003	39	1.59200392833178362048+003	39
38	1.5140919068199508817+003	39	1.5920646029991958563+003	40	1.67200379322976681300+003	40	1.67200379322976681300+003	40
39	1.592087304676019301+003	40	1.6720632275724048257+003	41	1.75400366251149997844+003	41	1.75400366251149997844+003	41
40	1.67208303988260412352+003	41	1.75406022546381920674+003	42	1.83800353637010358021+003	42	1.83800353637010358021+003	42
41	1.75407998031207619065+003	42	1.8380743185810878923+003	43	1.92400341489611432854+003	43	1.92400341489611432854+003	43
42	1.83807597479684510+003	43	1.92405482805441272603+003	44	2.0120032981035405325+003	44	2.0120032981035405325+003	44
43	1.92407196617197953662+003	44	2.01205239725423877255+003	45	2.10200318594982199433+003	45	2.10200318594982199433+003	45
44	2.01206876398437001182+003	45	2.10205012447572705059+003	46	2.19400307835113891340+003	46	2.19400307835113891340+003	46
45	2.10206577075360712760+003	46	2.19404799632309633159+003	47	2.28800297519415431416+003	47	2.28800297519415431416+003	47
46	2.19406266924549664612+003	47	2.2880460007894908040+003	48	2.38400207634501726658+003	48	2.38400207634501726658+003	48
47	2.28806033288745643716+003	48	2.38404412708781336110+003	49	2.48200278165625317965+003	49	2.48200278165625317965+003	49
48	2.38405787754034404653+003	49	2.48204236550510076260+003	50	2.58200269097202198349+003	50	2.58200269097202198349+003	50
49	2.48205554030250615600+003	50	2.58204070727677073947+003	51	2.68400260413211285227+003	51	2.68400260413211285227+003	51

PROLATE EIGENVALUES M = 10.00

M = 0			M = 1			M = 2			
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	
0	9.22430429724994515101+000	1	1.0287687673914681708+001	2	1.34630843187435830224+001	3	3.29381733218490544409+001	4	5.1524845577210860345+001
1	2.8133437328267274140+001	2	2.93389180416144814701+001	3	4.73015154765926251606+001	4	6.9303762387965509845+001	5	8.65075450658132547359+001
2	4.5889526502349136370+001	3	4.73015154765926251606+001	4	6.41063901051295253902+001	5	8.65075450658132547359+001	6	1.03598469132783093321+002
3	6.225773045077336J06+001	4	6.41063901051295253902+001	5	7.9724908552780661461+001	6	1.03598469132783093321+002	7	1.21209735738956548105+002
4	7.69932484221748565261+001	5	7.9724908552780661461+001	6	9.46219960706494295731+001	7	1.39956944423703874166+002	8	1.60273042669502631066+002
5	8.9739267233880505043+001	6	9.46219960706494295731+001	7	1.09450187268095056991+002	8	1.39956944423703874166+002	9	1.8239349791018574098+002
6	1.010354307250054623+002	7	1.09450187268095056991+002	8	1.2527144465787921906+002	9	1.60273042669502631066+002	10	2.06427851914283708166+002
7	1.1240106584840009482+002	8	1.2527144465787921906+002	9	1.4281159626640735252+002	10	2.06427851914283708166+002	11	2.32424422681866240009+002
8	1.2704025284769664001+002	9	1.4281159626640735252+002	10	1.62366878550363072848+002	11	2.32424422681866240009+002	12	2.60404784266528235618+002
9	1.4387200303747125679+002	10	1.62366878550363072848+002	11	1.84003229201069294192+002	12	2.60404784266528235618+002	13	2.90378877567037274788+002
10	1.6309665271709285350+002	11	1.84003229201069294192+002	12	2.0706761117858750395+002	13	2.90378877567037274788+002	14	3.22351384191659799815+002
11	1.8454761353824247540+002	12	2.0706761117858750395+002	13	2.33471272390577534939+002	14	3.22351384191659799815+002	15	3.58324501589030237294+002
12	2.0413339347061202044+002	13	2.33471272390577534939+002	14	2.61280388537618289728+002	15	3.58324501589030237294+002	16	3.9299213119499183128+002
13	2.335295080950355044+002	14	2.61280388537618289728+002	15	2.91123882215144533252+002	16	3.9299213119499183128+002	17	4.3027586989416076527+002
14	2.615737619177439794+002	15	2.91123882215144533252+002	16	3.2299413133619316889+002	17	4.3027586989416076527+002	18	4.70254629277584325089+002
15	2.9137312630363452635+002	16	3.2299413133619316889+002	17	3.56885451022485172592+002	18	4.70254629277584325089+002	19	5.1232533884903969118+002
16	3.2320895437757740663+002	17	3.56885451022485172592+002	18	3.92793557410079476015+002	19	5.1232533884903969118+002	20	5.5821788784184883659+002
17	3.570720352774321952+002	18	3.92793557410079476015+002	19	4.30715189454551737155+002	20	5.5821788784184883659+002	21	6.02202113646282491626+002
18	3.929958438052532417+002	19	4.30715189454551737155+002	20	4.70647833073797478358+002	21	6.02202113646282491626+002	22	6.5018785052642510582+002
19	4.308617451272513163+002	20	4.70647833073797478358+002	21	5.12589527928579135946+002	22	6.5018785052642510582+002	23	7.0017494303035637873+002
20	4.77769129273516309+002	21	5.12589527928579135946+002	22	5.5638728690049406684+002	23	7.0017494303035637873+002	24	7.52163237319848748263+002
21	5.1256457413252551475+002	22	5.5638728690049406684+002	23	6.0245496652279596450+002	24	7.52163237319848748263+002	25	8.06152609856508511250+002
22	5.56457413252551475+002	23	6.0245496652279596450+002	24	6.5045496652279596450+002	25	8.06152609856508511250+002	26	8.6212940435289703191+002
23	6.0259161761913364405+002	24	6.5045496652279596450+002	25	7.00420211675928601936+002	26	8.6212940435289703191+002	27	9.20134124896421334103+002
24	6.505442426370722363+002	25	7.00420211675928601936+002	26	7.5233928312642143216+002	27	9.20134124896421334103+002	28	9.8126012794751670+002
25	7.0001997641327845609+002	26	7.5233928312642143216+002	27	8.06361642499621902410+002	28	9.8126012794751670+002	29	1.0421186985596990824+003
26	7.524644525301501255+002	27	8.06361642499621902410+002	28	8.62335838716975666581+002	29	1.0421186985596990824+003	30	1.10611193538028100787+003
27	8.064333377150111375+002	28	8.62335838716975666581+002	29	9.2031449773717667482+002	30	1.10611193538028100787+003	31	1.17210571892013707271+003
28	8.6241149550841633502+002	29	9.2031449773717667482+002	30	9.80294304228635189+002	31	1.17210571892013707271+003	32	1.2400999379616167538+003
29	9.203746333253235059+002	30	9.80294304228635189+002	31	1.04227599275974481570+003	32	1.2400999379616167538+003	33	1.3100947111376803319+003
30	9.803746333253235059+002	31	1.04227599275974481570+003	32	1.10625933610235276400+003	33	1.3100947111376803319+003	34	1.38208982775204020020+003
31	9.93030191421063412144+002	32	1.10625933610235276400+003	33	1.17224414119788965300+003	34	1.38208982775204020020+003	35	1.4560853053919233899+003
32	1.10630447580333273063+003	33	1.17224414119788965300+003	34	1.2402302420872011215+003	35	1.4560853053919233899+003	36	1.5320811016111332442+003
33	1.172292477204423593+003	34	1.2402302420872011215+003	35	1.31021749568503196370+003	36	1.5320811016111332442+003	37	1.60007358376075564900+003
34	1.24027366235353245117+003	35	1.31021749568503196370+003	36	1.382057780948497975+003	37	1.60007358376075564900+003	38	1.77207020180999421700+003
35	1.3102564271497402772+003	36	1.382057780948497975+003	37	1.45619494162816130481+003	38	1.77207020180999421700+003	39	1.85606704463305844213+003
36	1.38224443117245193080+003	37	1.45619494162816130481+003	38	1.53218501229084737399+003	39	1.85606704463305844213+003	40	1.94206409305126742570+003
37	1.45623154247336273063+003	38	1.53218501229084737399+003	39	1.61017578778094496931+003	40	1.94206409305126742570+003	41	2.03006132985085365334+003
38	1.53221964434393250598+003	39	1.61017578778094496931+003	40	1.69016723577187986670+003	41	2.03006132985085365334+003	42	2.12005873955182650080+003
39	1.61021964434393250598+003	40	1.69016723577187986670+003	41	1.7721592925025069886+003	42	2.12005873955182650080+003	43	2.21205630820698344215+003
40	1.69019445405139254235+003	41	1.7721592925025069886+003	42	1.85615190157844713531+003	43	2.21205630820698344215+003	44	2.3060543232684774293+003
41	1.7721889927324162733+003	42	1.85615190157844713531+003	43	1.94214501299483959496+003	44	2.3060543232684774293+003	45	2.40205187322892201619+003
42	1.85618013837975501535+003	43	1.94214501299483959496+003	44	2.0303859266845558979+003	45	2.40205187322892201619+003	46	2.50004984789417202714+003
43	1.94217194730821344587+003	44	2.0303859266845558979+003	45	2.12013256939719412223+003	46	2.50004984789417202714+003	47	2.60004793787610421047+003
44	2.03016433349272440650+003	45	2.12013256939719412223+003	46	2.2121504844434351443+003	47	2.60004793787610421047+003	48	2.702046133464818359981+003
45	2.12015715254841347387+003	46	2.2121504844434351443+003	47	2.3061442075600022332+003	48	2.702046133464818359981+003	49	
46	2.2121504844434351443+003	47	2.3061442075600022332+003	48	2.40213343154962447061+003	49			
47	2.3061442075600022332+003	48	2.40213343154962447061+003	49					
48	2.40213343154962447061+003	49							
49	2.50013277744294481067+003								

PROLATE EIGENVALUES $M = 20.00$

$M = 0$			$M = 1$			$M = 2$		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	1.92399757992260223664+001	1	2.02670596762886436125+001	2	2.33480-19546901580081+001	2	2.33480-19546901580081+001	2
1	5.8196443932571211616+001	2	9.72844987352578073014+001	3	6.25417457959508004784+001	3	6.25417457959508004784+001	3
2	9.609038795728563811+001	3	9.72844987352578073014+001	4	1.00713-75236455177369+002	4	1.00713-75236455177369+002	4
3	1.32865216+176207000+002	4	1.34106488325383412157+002	5	1.37825-52749025759197+002	5	1.37825-52749025759197+002	5
4	1.68463102970323905257+002	5	1.6989671540544179936+002	6	1.7383952803355980965+002	6	1.7383952803355980965+002	6
5	2.028120486187794372+002	6	2.0492877549997492676+002	7	2.08716-7933338957249+002	7	2.08716-7933338957249+002	7
6	2.358228584187096699+002	7	2.3748159488287787397+002	8	2.42418-54977298371651+002	8	2.42418-54977298371651+002	8
7	2.6738042153893683765+002	8	2.6928824004266021405+002	9	2.74919-26790930636098+002	9	2.74919-26790930636098+002	9
8	2.9732622816878475131+002	9	2.99613960287227324501+002	10	3.06228-51697625403305+002	10	3.06228-51697625403305+002	10
9	3.25419140487636992+002	10	3.2836854783885384272+002	11	3.36428-59450042110640+002	11	3.36428-59450042110640+002	11
10	3.512638817749816231+002	11	3.55500487155385684381+002	12	3.59746-55338048600900+002	12	3.59746-55338048600900+002	12
11	3.743641941826793510+002	12	3.81438568995174731871+002	13	3.94617-51736538909671+002	13	3.94617-51736538909671+002	13
12	3.94935189281383513300+002	13	4.06794623323750414405+002	14	4.23668-9995586654797+002	14	4.23668-9995586654797+002	14
13	4.150342913926777652+002	14	4.32743922710634753588+002	15	4.53577-00063664603239+002	15	4.53577-00063664603239+002	15
14	4.37362124115864552+002	15	4.6028987805260977833+002	16	4.84901-36539870744570+002	16	4.84901-36539870744570+002	16
15	4.63038091689679578+002	16	4.8997739053235930396+002	17	5.17998-75479533283950+002	17	5.17998-75479533283950+002	17
16	4.91837067135123421+002	17	5.21970481516265071152+002	18	5.53025-40564242809300+002	18	5.53025-40564242809300+002	18
17	5.23355724-235463324+002	18	5.5665928855555557393+002	19	5.90149-2654943637623+002	19	5.90149-2654943637623+002	19
18	5.57321927-8430913480+002	19	5.921837678643792246+002	20	6.29117-08743076305243+002	20	6.29117-08743076305243+002	20
19	5.93721927-8430913480+002	20	6.31581592142635548796+002	21	6.70764-91483812959783+002	21	6.70764-91483812959783+002	21
20	6.3234221-26638726733+002	21	6.72517100470115948766+002	22	7.13887-5270185990540+002	22	7.13887-5270185990540+002	22
21	6.7312877-73835396830+002	22	7.1559427142812777035+002	23	7.59280-88456016942161+002	23	7.59280-88456016942161+002	23
22	7.1616640579612682894+002	23	7.607886391792942747+002	24	8.06736-60574136659436+002	24	8.06736-60574136659436+002	24
23	7.612938224-3360486650+002	24	8.08815936322638372383+002	25	8.56247-31446478515513+002	25	8.56247-31446478515513+002	25
24	8.08531535455212421764+002	25	8.5745705440793942316+002	26	9.07808-1883091758737+002	26	9.07808-1883091758737+002	26
25	8.78611433-5003035024+002	26	9.0892579533582975295+002	27	9.61412-4747957709388+002	27	9.61412-4747957709388+002	27
26	9.092681694475292927+002	27	9.6240810031392233802+002	28	1.01705-23459331931350+003	28	1.01705-23459331931350+003	28
27	9.627406067999395935+002	28	1.01796518130455065152+003	29	1.07472-78795183889110+003	29	1.07472-78795183889110+003	29
28	1.118269242-127503505+003	29	1.0756683440639670047+003	30	1.13443-9839028724226+003	30	1.13443-9839028724226+003	30
29	1.37584616548094998910+003	30	1.1350724370721736527+003	31	1.19616-43964150971686+003	31	1.19616-43964150971686+003	31
30	1.354649072529610715+003	31	1.19888151409252364497+003	32	1.25992-19367084126107+003	32	1.25992-19367084126107+003	32
31	1.1971206443348872603+003	32	1.26058550440757412159+003	33	1.32569-68903997589796+003	33	1.32569-68903997589796+003	33
32	1.2608709448140531935+003	33	1.3263156913334157897+003	34	1.39349-69412804974488+003	34	1.39349-69412804974488+003	34
33	1.32652214816079538182+003	34	1.3940690812834111018+003	35	1.46330-26193035075035+003	35	1.46330-26193035075035+003	35
34	1.39426194990106593257+003	35	1.4638430238860562620+003	36	1.53512-68872128649927+003	36	1.53512-68872128649927+003	36
35	1.46402369271309735744+003	36	1.5363534222835125474+003	37	1.60496-47993311498525+003	37	1.60496-47993311498525+003	37
36	1.53580496-29985310880+003	37	1.60944407623499077322+003	38	1.68481-32100912492058+003	38	1.68481-32100912492058+003	38
37	1.60960366376921190211+003	38	1.68526753640957489336+003	39	1.76267-0526597052027+003	39	1.76267-0526597052027+003	39
38	1.6854179877086192490+003	39	1.76310424581614751541+003	40	1.84254-64984183755523+003	40	1.84254-64984183755523+003	40
39	1.7632463488380694402+003	40	1.8429529086530801996+003	41	1.92443-2038727790856+003	41	1.92443-2038727790856+003	41
40	1.84308735-9737783619+003	41	1.9248123841532394532+003	42	2.00831-9072130223341+003	42	2.00831-9072130223341+003	42
41	1.9249398053287878589+003	42	2.00868168475625134530+003	43	2.09421-040603022370+003	43	2.09421-040603022370+003	43
42	2.00880260758098967180+003	43	2.00855985783492400925+003	44	2.18211796098180585181+003	44	2.18211796098180585181+003	44
43	2.09467481721856923425+003	44	2.18244617026371434559+003	45	2.27202709387381512175+003	45	2.27202709387381512175+003	45
44	2.1825555915984411524+003	45	2.27233989536937196486+003	46	2.36394-92319891713206+003	46	2.36394-92319891713206+003	46
45	2.27244417570336097+003	46	2.3642401839371487841+003	47	2.45786-98516421808551+003	47	2.45786-98516421808551+003	47
46	2.3643399773762133296+003	47	2.45814712426097052336+003	48	2.5578-86193422753020+003	48	2.5578-86193422753020+003	48
47	2.4582421813483564248+003	48	2.554059550189817868+003	49	2.65117-17631499117038+003	49	2.65117-17631499117038+003	49
48	2.5541504629440085196+003	49	2.7517723733745959802+003	50	2.751045871349453816+003	50	2.751045871349453816+003	50
49	2.6520642663290947817+003	50	2.75189975927973574191+003	51	2.85358-76522139740523+003	51	2.85358-76522139740523+003	51

PROLATE EIGENVALUES $M = 40.00$ $M = 0$

L	EIGENVALUE	L	EIGENVALUE
0	5.92451586/-2512807492+001	1	4.02581518037133060043+001
1	1.1822546668602735228+002	2	1.19265504492191275947+002
2	1.9617538281690410392+002	3	1.97244720478332331858+002
3	2.7307342252024721815+002	4	2.74174620127341346600+002
4	3.484965411965072304813+002	5	3.50032519826745458301+002
5	4.23619937735749739108+002	6	4.24794049318693469686+002
6	4.9721681232407197111+002	7	4.98432937139770725214+002
7	5.69658198591229431381+002	8	5.702075682441051925+002
8	6.40912120146941614450+002	9	6.4226624419123133686+002
9	7.1094418017864295053+002	10	7.1216835025938964943+002
10	7.7971653910015099139+002	11	7.81154422269329862326+002
11	8.47153533552903941883+002	12	8.48698619382189793802+002
12	9.1350471873774641795+002	13	9.14904193532399107415+002
13	9.7802077111600462248+002	14	9.79720615470097158620+002
14	1.0412727356981765195+003	15	1.04309101410662468670+003
15	1.1029965315472247858+003	16	1.10495085081144446387+003
16	1.1630921891251912191+003	17	1.16522623597199662849+003
17	1.22147995575941919662+003	18	1.22383182248714037805+003
18	1.2780343549664025763+003	19	1.28066833420208138795+003
19	1.33201426163670998167+003	20	1.33662035801139964658+003
20	1.3849835541198492728+003	21	1.38955725783089795771+003
21	1.43489720120792844706+003	22	1.43934752405052817266+003
22	1.48188159754329562508+003	23	1.4879154239988361288+003
23	1.5252752642850736308+003	24	1.53438891640749718761+003
24	1.56455613558297591173+003	25	1.57933398817008928947+003
25	1.60079288925220702282+003	26	1.62386687052542049933+003
26	1.63733744959539483+003	27	1.66936486402718028536+003
27	1.67439615209590973+003	28	1.71693525540438753466+003
28	1.7220877725218270113+003	29	1.76714824447331522192+003
29	1.7707939115982881532+003	30	1.8201576966502939918+003
30	1.822961113850113763+003	31	1.87992583496542911794+003
31	1.87820123614894858284+003	32	1.9343610953402981412+003
32	1.9362704613050715021+003	33	1.99337058264034927337+003
33	1.9970114191958563742+003	34	2.0588736044758613907+003
34	2.06030803231639901162+003	35	2.12480279483392630405+003
35	2.1260734854282090427+003	36	2.19310227905808603187+003
36	2.1942398948571686265+003	37	2.2632755370316329816+003
37	2.2647528742219955047+003	38	2.33663356935049062866+003
38	2.33756809182091575071+003	39	2.4179343384608045773+003
39	2.41264679265147432441+003	40	2.48917709923992310447+003
40	2.4899641845528723966+003	41	2.567676054806967680986+003
41	2.56948818429524505577+003	42	2.65052307083857332940+003
42	2.6511985088674577483+003	43	2.7344467062096215441+003
43	2.735075974254920746+003	44	2.820517931380865393+003
44	2.82110396154265672026+003	45	2.9087160968460606371+003
45	2.90926797688133905201+003	46	2.990307862913169111+003
46	2.9995553262258970075+003	47	3.0914665267301493994+003
47	3.0919546169204889367+003	48	3.1859954852133490945+003
48	3.1864565745062148527+003	49	3.28261552439096987866+003
49	3.283051614242127424467+003	50	3.38131911469762724783+003

 $M = 1$

L	EIGENVALUE	L	EIGENVALUE
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 $M = 2$

L	EIGENVALUE	L	EIGENVALUE
2	4.32471138072762252725+001	2	4.32471138072762252725+001
3	1.223855263332474242287+002	3	1.223855263332474242287+002
4	2.0045257030357599085+002	4	2.0045257030357599085+002
5	2.7477919843085249328+002	5	2.7477919843085249328+002
6	3.53440104837436532551+002	6	3.53440104837436532551+002
7	4.28315727763286877331+002	7	4.28315727763286877331+002
8	5.0208070810754210891+002	8	5.0208070810754210891+002
9	5.7470740236648260794+002	9	5.7470740236648260794+002
10	6.4616873718542836884+002	10	6.4616873718542836884+002
11	7.1643219144567721778+002	11	7.1643219144567721778+002
12	7.85465866207994948630+002	12	7.85465866207994948630+002
13	8.53233242660967323525+002	13	8.53233242660967323525+002
14	9.1969523799161307619+002	14	9.1969523799161307619+002
15	9.8480919892325747877+002	15	9.8480919892325747877+002
16	1.04852998648214305450+003	16	1.04852998648214305450+003
17	1.1108076857348358077+003	17	1.1108076857348358077+003
18	1.17159145044229109064+003	18	1.17159145044229109064+003
19	1.23082703575965959968+003	19	1.23082703575965959968+003
20	1.28846198900174282694+003	20	1.28846198900174282694+003
21	1.34445947217329359785+003	21	1.34445947217329359785+003
22	1.39881174821915143829+003	22	1.39881174821915143829+003
23	1.4515762251131931412+003	23	1.4515762251131931412+003
24	1.50292795426664152988+003	24	1.50292795426664152988+003
25	1.55324191247187709666+003	25	1.55324191247187709666+003
26	1.60310744889800704341+003	26	1.60310744889800704341+003
27	1.6532716963520321855+003	27	1.6532716963520321855+003
28	1.70448261650453066508+003	28	1.70448261650453066508+003
29	1.7573346602282286638+003	29	1.7573346602282286638+003
30	1.81221750357785923910+003	30	1.81221750357785923910+003
31	1.86932473528955372027+003	31	1.86932473528955372027+003
32	1.92875185695383418425+003	32	1.92875185695383418425+003
33	1.99052115143425422510+003	33	1.99052115143425422510+003
34	2.0346165216375874076+003	34	2.0346165216375874076+003
35	2.1210257941534827901+003	35	2.1210257941534827901+003
36	2.18971180213396675860+003	36	2.18971180213396675860+003
37	2.26065475601816080309+003	37	2.26065475601816080309+003
38	2.33384116406706799619+003	38	2.33384116406706799619+003
39	2.4092370901847920914+003	39	2.4092370901847920914+003
40	2.486822102338992117+003	40	2.486822102338992117+003
41	2.56658257195921139737+003	41	2.56658257195921139737+003
42	2.6485063314454758317+003	42	2.6485063314454758317+003
43	2.7325698249363428494+003	43	2.7325698249363428494+003
44	2.81875176946744073790+003	44	2.81875176946744073790+003
45	2.9070645251228085266+003	45	2.9070645251228085266+003
46	2.9974840007018393269+003	46	2.9974840007018393269+003
47	3.090010193481090123+003	47	3.090010193481090123+003
48	3.1846113510933621253+003	48	3.1846113510933621253+003
49	3.28130759877651189368+003	49	3.28130759877651189368+003
50	3.38007910120390648084+003	50	3.38007910120390648084+003
51	3.48092184738689427585+003	51	3.48092184738689427585+003

PROBATE EIGENVALUES M = 60.00

M = 0			M = 1			M = 2		
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L
0	5.92465077600482414096+001	1	6.0255356572130457435+001	2	6.328095054803959333+001	2	6.328095054803959333+001	2
1	1.78233855000564677438+002	2	1.79259996390779803349+002	3	1.8233826379818712192+002	3	1.8233826379818712192+002	3
2	2.9620126720483865746+002	3	2.9724585320105396517+002	4	3.00379366043744279416+002	4	3.00379366043744279416+002	4
3	4.1315261517535788111+002	4	4.149935689275972861+002	5	4.17391570102767076850+002	5	4.17391570102767076850+002	5
4	5.2902166518056524549+002	5	5.3006319247759559559+002	6	5.3336035588650872269+002	6	5.3336035588650872269+002	6
5	6.4386334934477448078+002	6	6.4495188466990861372+002	7	6.48271370912987821804+002	7	6.48271370912987821804+002	7
6	7.5758069349285915492+002	7	7.5872049893451323034+002	8	7.6210938351653997326+002	8	7.6210938351653997326+002	8
7	8.70241515471611886232+002	8	8.713958041211469388+002	9	8.74858429884092405440+002	9	8.74858429884092405440+002	9
8	9.8178132776501816098+002	9	9.8286061957607090844+002	10	9.8650175596114114265+002	10	9.8650175596114114265+002	10
9	1.0921884162060320274+003	10	1.0933968482767644753+003	11	1.0970247528973563440+003	11	1.0970247528973563440+003	11
10	1.2014476457536506273+003	11	1.20265539288674245640+003	12	1.2063998852625551179+003	12	1.2063998852625551179+003	12
11	1.3095356315175116305+003	12	1.3108066696646484866+003	13	1.31461661101264489437+003	13	1.31461661101264489437+003	13
12	1.4164326428048787537+003	13	1.4177374864612916758+003	14	1.42165129207033212728+003	14	1.42165129207033212728+003	14
13	1.5221145525746014131+003	14	1.5243699499326573664+003	15	1.52748209417358735755+003	15	1.52748209417358735755+003	15
14	1.62655814739657711105+003	15	1.62794038186591817130+003	16	1.6320858747036729492+003	16	1.6320858747036729492+003	16
15	1.72972605285851853555+003	16	1.7316193259434842829+003	17	1.73543805514123570306+003	17	1.73543805514123570306+003	17
16	1.8316206561373138221+003	17	1.8330640855471281497+003	18	1.8375124810633652746+003	18	1.8375124810633652746+003	18
17	1.9324616431922016677+003	18	1.9337072752256714502+003	19	1.9382823940016382741+003	19	1.9382823940016382741+003	19
18	2.0313671348327999163+003	19	2.03367562593780345+003	20	2.0377145788080012680+003	20	2.0377145788080012680+003	20
19	2.1292011648017336970+003	20	2.1308471539149161706+003	21	2.13578050598914594079+003	21	2.13578050598914594079+003	21
20	2.2255662940105753075+003	21	2.2273021545171038187+003	22	2.2324447562508333070+003	22	2.2324447562508333070+003	22
21	2.3205014144557530408+003	22	2.322943305032514342+003	23	2.32767044663268499272+003	23	2.32767044663268499272+003	23
22	2.413657131877383013+003	23	2.415779326638919029+003	24	2.421478037290617056+003	24	2.421478037290617056+003	24
23	2.505261802327276504+003	24	2.50770840315194440683+003	25	2.5136438794724669592+003	25	2.5136438794724669592+003	25
24	2.5959212001339802120+003	25	2.5980277242706853168+003	26	2.60430224024728077641+003	26	2.60430224024728077641+003	26
25	2.6844874944191112280+003	26	2.68667738692921899165+003	27	2.69334268767813120154+003	27	2.69334268767813120154+003	27
26	2.77120713289206191473+003	27	2.7735903181414334048+003	28	2.78071106231922037477+003	28	2.78071106231922037477+003	28
27	2.8561242767178699120+003	28	2.8569089560332910133+003	29	2.8663425378435531685+003	29	2.8663425378435531685+003	29
28	2.93916457241674330298+003	29	2.9418629570611928075+003	30	2.95019566158303927459+003	30	2.95019566158303927459+003	30
29	3.020326498285380023+003	30	3.0209789788962021887+003	31	3.03218599651439832785+003	31	3.03218599651439832785+003	31
30	3.0987650331548828806+003	31	3.1021918455830076265+003	32	3.11225980635674709504+003	32	3.11225980635674709504+003	32
31	3.175162834564638556+003	32	3.17904293394595256455+003	33	3.19036607103584778342+003	33	3.19036607103584778342+003	33
32	3.2490106724814129963+003	33	3.253500458621950002+003	34	3.2664588997932411945+003	34	3.2664588997932411945+003	34
33	3.319076522355840541+003	34	3.3254220640285516110+003	35	3.34057453999539150599+003	35	3.34057453999539150599+003	35
34	3.38764027178087452718+003	35	3.39460744160299965865+003	36	3.41282661038866720818+003	36	3.41282661038866720818+003	36
35	3.4513716129444634865+003	36	3.4610682396510027266+003	37	3.4834983744221562607+003	37	3.4834983744221562607+003	37
36	3.5101664505728207955+003	37	3.5218272501609958940+003	38	3.53309561004979729260+003	38	3.53309561004979729260+003	38
37	3.56386067678015256323+003	38	3.5677059222310572258+003	39	3.6223425298226323239+003	39	3.6223425298226323239+003	39
38	3.61485922627188516026+003	39	3.650146806664911657+003	40	3.67209457415570084193+003	40	3.67209457415570084193+003	40
39	3.6673637855665947351+003	40	3.71404070687563975+003	41	3.7631442040708017369+003	41	3.7631442040708017369+003	41
40	3.7247920615886297025+003	41	3.7804647327240794248+003	42	3.83611081734150987182+003	42	3.83611081734150987182+003	42
41	3.7876115623311493156+003	42	3.850647457517550434+003	43	3.9113853661430480768+003	43	3.9113853661430480768+003	43
42	3.8525955853862855808+003	43	3.928803356134839014+003	44	3.989176290844137462+003	44	3.989176290844137462+003	44
43	3.926537714094488892+003	44	3.998607069663848840+003	45	4.069550838510682824+003	45	4.069550838510682824+003	45
44	4.002217403172713984+003	45	4.0778219534379466536+003	46	4.152382008710908114+003	46	4.152382008710908114+003	46
45	4.080275801383818026+003	46	4.1598176156161560884+003	47	4.23810734345661510453+003	47	4.23810734345661510453+003	47
46	4.16267225289601921+003	47	4.2445562624106373897+003	48	4.3262293541365858665+003	48	4.3262293541365858665+003	48
47	4.24073367600607261551+003	48	4.3300380107073903966+003	49	4.316862331173752434+003	49	4.316862331173752434+003	49
48	4.33394741429986451756+003	49	4.4220798373516809300+003	50	4.50996654840233255785+003	50	4.50996654840233255785+003	50
49	4.4238321466824447258+003	50	4.5147165266492246449+003	51	4.605503537838370322912+003	51	4.605503537838370322912+003	51

PROBATE EIGENVALUES M = 80.00

M = 0

EIGENVALUE

L

7.92476187374838107134.001
2.38238016470159464381.002
3.96213813538782121261.002
5.5315004382874117283.002
7.09081247911529147104.002
8.639518485238767070322.002
1.01776573560458646547.003
1.1705114413341385537.003
1.322170766324961233.003
1.47275030503060297123.003
1.6222183142358871485.003
1.77056778512441837914.003
1.91778485785546040565.003
2.06385509475581331555.003
2.208763436571138788537.003
2.3524941726173072619.003
2.4950308612837737942.003
2.63635630526422387213.003
2.7765247576408018413.003
2.915300478171077374.003
3.05288032467729918121.003
3.18917115305938565031.003
3.3241508277614838284.003
3.4577959830652417597.003
3.59008187468861077257.003
3.720922318443446907.003
3.85046910635867522691.003
3.97851268391552121689.003
4.10508107226997071464.003
4.2301400251390754663.003
4.35365278732124254893.003
4.4755747571202149304.003
4.59587694113938545713.003
4.7144981351185642139.003
4.83139153505597409761.003
4.9465039799783401273.003
5.0597618330883102515.003
5.17110564148500342333.003
5.2804527699580640135.003
5.38771334949523023543.003
5.49278398839312829025.003
5.59554402807972129207.003
5.6985011611180064383.003
5.7935278853238309023.003
5.8885827366256596335.003
5.9805289458449876232.003
6.0682067899519768423.003
6.15221291273084840103.003
6.23117470693046735123.003
6.30415421804417748623.003

M = 1

EIGENVALUE

L

8.025398088138211575858.001
2.39257375560832401082.002
3.9724667474407923316.002
5.54211911011344114563.002
7.10412779348452975289.002
8.65028621768074552901.002
1.0188840799112143746.003
1.17162074507136050214.003
1.3233037027728780967.003
1.47389508616510615276.003
1.62338211771985514507.003
1.77175153701100010139.003
1.9198295575728432931.003
2.06508162067898585255.003
2.21001335762802316073.003
2.3537685441053032272.003
2.49333108210908302806.003
2.6376838248559796843.003
2.7780894797525375308.003
2.91668765419116545826.003
3.05430022254734274717.003
3.1906258970794430925.003
3.3256427974620627928.003
3.453278465022824560.003
3.59165650383854395323.003
3.72260293430364007948.003
3.8521395577510242853.003
3.98023702709640260104.003
4.1086640041181906045.003
4.23192691192944746199.003
4.3556970555148951161.003
4.475735281636843140.003
4.597956335143033206.003
4.7166725073493482432.003
4.8336722757348524513.003
4.94890111904936258220.003
5.06298942790266898.003
5.17379939993595797950.003
5.2833282195154013804.003
5.390822285778240168.003
5.49612751088045866376.003
5.5991969859618924670.003
5.6998765186256074457.003
5.7980793505744124539.003
5.8935451626923686979.003
5.9861476599008238767.003
6.07574213817582026532.003
6.16214367460229114168.003
6.245433145469733085.003
6.32620357380182949140.003

M = 2

EIGENVALUE

L

8.32730961508577620158.001
2.42315442839564631829.002
4.00345238167037327187.002
5.57352603805741906651.002
7.13327336742135171153.002
8.68258931481921335556.002
1.02213436088945720529.003
1.17494845552652912638.003
1.3266834813951483162.003
1.4732931552544651654.003
1.6268733803863345848.003
1.77530261495697519487.003
1.92260344418334694149.003
2.068761745273441364.003
2.2137628110597520092.003
2.3575931019123114366.003
2.50023124284739695131.003
2.64166589292572176637.003
2.78187774984711826.003
2.9208457592396674595.003
3.058550906496656196.003
3.1949891505198821349.003
3.3301175456637516283.003
3.46392193109600710265.003
3.593787403144101127.003
3.7274630643739541682.003
3.8571485349238369269.003
3.98540718644942310160.003
4.1122030170875096171.003
4.2375232390837875877.003
4.3613152383121040349.003
4.483542026866501949.003
4.604184556430484960.003
4.723185470592967865.003
4.8405015742735250587.003
4.95608662910163373595.003
5.0698870421180606610.003
5.18185176211083798720.003
5.2919154124355284744.003
5.40001483023559547643.003
5.50608104163240974151.003
5.6100419548650878933.003
5.711824888995545184.003
5.81136204747703147166.003
5.90860163949258703481.003
6.00352921548270910271.003
6.0962034864656560978.003
6.18682335579011264027.003
6.27577743363302896611.003
6.36370568218137938393.003

PROLATE EIGENVALUES M = 100.00

M = 0			M = 1			M = 2			
L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE	L	EIGENVALUE
0	9.92481011089832525503+001	1	1.00293177613414938377+002	2	1.03268405532555038476+002	2	1.03268405532555038476+002	2	1.03268405532555038476+002
1	2.9824095665917633377+002	2	2.9925984340411102221+002	3	3.0230199864780856075+002	3	3.0230199864780856075+002	3	3.0230199864780856075+002
2	4.9622122118867601017+002	3	4.9747240283788669448+002	4	4.9747240283788669448+002	4	4.9747240283788669448+002	4	4.9747240283788669448+002
3	6.931829723344907287+002	4	6.9421480550492567262+002	5	6.973303441405512754788+002	5	6.973303441405512754788+002	5	6.973303441405512754788+002
4	8.0911617856239711044+002	5	8.1016449805335016807+002	6	8.9330941760738934688+002	6	8.9330941760738934688+002	6	8.9330941760738934688+002
5	1.0401394093333021843+003	6	1.085073927804811030+003	7	1.080215560849630202093+003	7	1.080215560849630202093+003	7	1.080215560849630202093+003
6	1.27867322453949452+003	7	1.278939335948484241+003	8	1.28215560849630202093+003	8	1.28215560849630202093+003	8	1.28215560849630202093+003
7	1.47067262080282253+003	8	1.4717518639455282+003	9	1.4750056390412328888+003	9	1.4750056390412328888+003	9	1.4750056390412328888+003
8	1.66246904903325841+003	9	1.663502503204601173+003	10	1.666679510578202847651+003	10	1.666679510578202847651+003	10	1.666679510578202847651+003
9	1.853011162291824159+003	10	1.8541820676009755996+003	11	1.857514801109683331+003	11	1.857514801109683331+003	11	1.857514801109683331+003
10	2.04265063908423739+003	11	2.0437808400033539+003	12	2.047159252763320113+003	12	2.047159252763320113+003	12	2.047159252763320113+003
11	2.2311497056808093+003	12	2.232891788320944691+003	13	2.235707058815605114+003	13	2.235707058815605114+003	13	2.235707058815605114+003
12	2.4185426712714734874+003	13	2.4196968325416537769+003	14	2.4231591133111865576+003	14	2.4231591133111865576+003	14	2.4231591133111865576+003
13	2.604823682927484643+003	14	2.6059933170738000621+003	15	2.60950211945420010294+003	15	2.60950211945420010294+003	15	2.60950211945420010294+003
14	2.7899821888595470648+003	15	2.79116793151775800871+003	16	2.7947250444689290705+003	16	2.7947250444689290705+003	16	2.7947250444689290705+003
15	2.9740070180103005389+003	16	2.9720951435058142733+003	17	2.9788168675201688842+003	17	2.9788168675201688842+003	17	2.9788168675201688842+003
16	3.156886632380635664+003	17	3.1510656488739913513+003	18	3.16176420867401019725+003	18	3.16176420867401019725+003	18	3.16176420867401019725+003
17	3.338007096129101819+003	18	3.33984719355368817260+003	19	3.34356130946930242978+003	19	3.34356130946930242978+003	19	3.34356130946930242978+003
18	3.519182061734291413+003	19	3.520419098037294582+003	20	3.52419001200395788105+003	20	3.52419001200395788105+003	20	3.52419001200395788105+003
19	3.6985327419762129142+003	20	3.699809548474001834+003	21	3.70363973641361253096+003	21	3.70363973641361253096+003	21	3.70363973641361253096+003
20	3.876707884054943210+003	21	3.8780053368145009429+003	22	3.881897456574134592+003	22	3.881897456574134592+003	22	3.881897456574134592+003
21	4.053673427014958323+003	22	4.054982812330068305+003	23	4.05894067386402867978+003	23	4.05894067386402867978+003	23	4.05894067386402867978+003
22	4.229415045078789140+003	23	4.23075771813561605876+003	24	4.2347823887439285354+003	24	4.2347823887439285354+003	24	4.2347823887439285354+003
23	4.40391996418244689348+003	24	4.40328533964361847390+003	25	4.4093106999721645210+003	25	4.4093106999721645210+003	25	4.4093106999721645210+003
24	4.5771700728848667937+003	25	4.5795603330332813356+003	26	4.58273062150730485796+003	26	4.58273062150730485796+003	26	4.58273062150730485796+003
25	4.7491503111248976241+003	26	4.75056649697971077228+003	27	4.75481934492602028517+003	27	4.75481934492602028517+003	27	4.75481934492602028517+003
26	4.919839405973395641+003	27	4.92128789336563952066+003	28	4.92561490209398337091+003	28	4.92561490209398337091+003	28	4.92561490209398337091+003
27	5.08923340897431717+003	28	5.09370635581440780293+003	29	5.09512426984609645486+003	29	5.09512426984609645486+003	29	5.09512426984609645486+003
28	5.257300712510007532+003	29	5.258044334651561225966+003	30	5.26331369378355545237+003	30	5.26331369378355545237+003	30	5.26331369378355545237+003
29	5.42405157351614088+003	30	5.4256227055090664571+003	31	5.4301866363355517266+003	31	5.4301866363355517266+003	31	5.4301866363355517266+003
30	5.58938990257206139+003	31	5.590608058662874552+003	32	5.595659719674558048+003	32	5.595659719674558048+003	32	5.595659719674558048+003
31	5.75332883330158831+003	32	5.7569713868138055563+003	33	5.759794664149141570+003	33	5.759794664149141570+003	33	5.759794664149141570+003
32	5.9159504670672837583+003	33	5.91759525080381059584+003	34	5.922528219233455171041+003	34	5.922528219233455171041+003	34	5.922528219233455171041+003
33	6.0771004231307280933+003	34	6.078623964350556690+003	35	6.0838208525891593304+003	35	6.0838208525891593304+003	35	6.0838208525891593304+003
		35	6.2385275210481227229+003	36	6.24371483242566007368+003	36	6.24371483242566007368+003	36	6.24371483242566007368+003
		36	6.3967947795903098999+003	37	6.40212180591519240495+003	37	6.40212180591519240495+003	37	6.40212180591519240495+003
		37	6.55355884716887145258+003	38	6.55903702217740536716+003	38	6.55903702217740536716+003	38	6.55903702217740536716+003
		38	6.7079456062198874180+003	39	6.71443305345475591779+003	39	6.71443305345475591779+003	39	6.71443305345475591779+003
		39		40	6.8682888881753325368+003	40	6.8682888881753325368+003	40	6.8682888881753325368+003
		40		41	7.02054984002142070528+003	41	7.02054984002142070528+003	41	7.02054984002142070528+003
		41		42	7.17120728038709457519+003	42	7.17120728038709457519+003	42	7.17120728038709457519+003
		42		43	7.32021456310611102246+003	43	7.32021456310611102246+003	43	7.32021456310611102246+003

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13. ABSTRACT The wave equation in prolate spheroidal coordinates was separated into radial and angle functions. The differential equation satisfied by the angle functions was written in the form of an eigenvalue problem, that is, as a linear operator operating on eigenfunctions to yield the same eigenfunctions multiplied by corresponding eigenvalues. The eigenvalues were numerically calculated by use of Galerkin's method. This method reduces to the evaluation of the characteristic roots of a large matrix. An 80 by 80 matrix is chosen and a detailed calculation on a high-speed computer leads to a tabulation. The table of prolate eigenvalues published here has the range $m = 0, 1, 2; l = m(1) m + 49; h = 0.1(0.1) 0.9, 1.0(0.2) 8.0, 10.0, 20.0(20.0) 100.0$. The precision is 21 significant figures.		

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